

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Broadcast Incentive Auction Comment Public)	
Notice Auction 1000, 1001 and 1002)	AU Docket No. 14-252
)	
Expanding the Economic and Innovation)	
Opportunities of Spectrum Through Incentive)	GN Docket No. 12-268
Auctions)	

**REPLY COMMENTS OF
EXPANDING OPPORTUNITIES FOR BROADCASTERS COALITION**

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EXECUTIVE SUMMARY

When the FCC adopts its *Auction Procedures Public Notice*, it will mark a watershed moment for the Incentive Auction. No longer will the auction be just a theoretical possibility and an interesting subject for academic debate; rather, the auction will represent a genuine business opportunity, with real prices, real procedures, and the real possibility of transforming how Americans utilize scarce spectrum resources. With great opportunity, however, comes great challenges, and the opening comments in this proceeding reflect several challenges facing the Commission, namely: (1) how to attract widespread participation among broadcasters—particularly those with the greatest impact on the repacking process; and (2) how to maximize the public welfare generated by the Incentive Auction.

Addressing these challenges requires more than just intuition and ideas; it requires analysis of hard facts and scientific data. The FCC prides itself on being a fact-based, data-driven agency.ⁱ In fact, Chairman Wheeler has declared that, to have a successful Incentive Auction, the Commission “[f]irst and foremost . . . must make fact-based policy decisions in an open and transparent manner.”ⁱⁱ The Expanding Opportunities for Broadcasters Coalition (the “Coalition”) has heeded that call, submitting detailed economic analysis from renowned auction economist Peter Cramton and his team to support the specific policy recommendations proposed by the Coalition. No other party has submitted such detailed, data-driven analysis, tied to specific policy recommendations for the reverse auction.

ⁱ See, e.g., Remarks of Tom Wheeler, Chairman, FCC at The Ohio State University (Dec. 2, 2013), available at <http://www.fcc.gov/document/remarks-fcc-chairman-tom-wheeler-ohio-state-university> (committing to use the FCC’s Congressional authority “in a fact-based, data-driven manner”); Remarks of Tom Wheeler, Chairman, FCC, to Council of Chief State School Officers Legislative Conference (Mar. 17, 2014), available at <http://www.fcc.gov/document/chairman-wheeler-remarks-ccsso-legislative-conference> (committing to develop “fact-based” E-Rate policies).

ⁱⁱ Tom Wheeler, *The Path to a Successful Incentive Auction*, Official FCC Blog (Dec. 6, 2013), <http://www.fcc.gov/blog/path-successful-incentive-auction-0> (“Dec. 2013 Blog Post”).

Dr. Cramton's analysis, as described in his 61 page Expert Report and extensively detailed in the accompanying 49 page Appendix, conclusively proves that: (1) the Coalition's proposed pricing formula will produce an auction that is more robust and more faithful to the principle, adopted by the Commission in the *Incentive Auction Report and Order*, of paying stations based on their impact on clearing spectrum; (2) the FCC must shift its focus from minimizing all impairment to minimizing impairment in key markets; and (3) the targeted round zero reserve approach proposed by the Coalition clears more spectrum with less impairment than the FCC's complex and under-developed dynamic reserve pricing proposal ("DRP").

The opening comments reflect broad support for the Coalition's proposals. Commenters agree that the auction must be simple, transparent, and fair for broadcast participants. They also agree that the FCC must offer prices reflective of the recent AWS-3 auction to attract substantial broadcaster participation, which will enable the Commission to achieve or exceed its longstanding goal of reallocating at least 126 MHz on a near-nationwide basis while, at the same time, ensuring that a sufficient amount of unimpaired spectrum is available in gateway markets like New York and Los Angeles. And, they almost universally agree that DRP is a prescription for failure that will dampen broadcaster enthusiasm for the auction and create unnecessary impairment that will destroy forward auction values.

The Coalition has provided a blueprint for a wildly successful reverse auction that will produce the win-win-win for wireless providers, broadcasters, and most importantly, consumers, that serves as the impetus for this first-of-its-kind Incentive Auction. It is imperative that the FCC now adopt these data-driven proposals to ensure that the Incentive Auction achieves its full potential.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	ii
I. ANY DEVIATION FROM THE FCC’S CURRENT AUCTION TIMELINE WOULD BE UNJUSTIFIED AND HAVE POTENTIALLY DISASTROUS CONSEQUENCES.	3
II. THE COMMISSION’S PROPOSED PRICING POLICIES MUST BE MODIFIED TO REFLECT THE VALUE OF BROADCAST SPECTRUM.	4
III. THE COMMISSION SHOULD MODIFY ITS CLEARING TARGET AND RESERVE PRICING PROCEDURES TO PRIORITIZE REALLOCATION OF UNIMPAIRED SPECTRUM IN THE LARGEST MARKETS, WHERE SPECTRUM HAS THE GREATEST VALUE.	7
A. The Commission Should Adopt a Near-National Clearing Target That Optimizes Spectrum Reallocation in Key Markets.	8
1. Optimizing the Clearing Target to Key Markets Will Maximize Consumer Welfare.	9
2. Optimizing the Clearing Target to Key Markets Will Not Harm TV Translators.	13
3. The Commission Should Limit Impairment to Forward Auction Licenses.	13
B. The Commission Should Either Abandon Reserve Pricing Altogether or Replace Dynamic Reserve Pricing with Round Zero Reserve.	14
1. The Commission’s DRP Proposal is Irreparably Flawed.	15
2. If the Commission Adopts Any Reserve Mechanism, It Should Adopt the Coalition’s Round Zero Reserve Proposal.	17
IV. THE COMMISSION SHOULD INCREASE THE TRANSPARENCY OF THE REVERSE AUCTION TO PROVIDE PRICE DISCOVERY AND INSPIRE BROADCASTER CONFIDENCE.	19
V. CONCLUSION.	22

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The Expanding Opportunities for Broadcasters Coalition (the “Coalition”)¹ submits these replies to comments filed in response to the to the Commission’s *Public Notice* in the above-referenced proceedings.² It is evident from the opening comments that although the tremendous efforts of the FCC and its Staff have placed the auction on a path to success, there are a number of potential stumbling blocks that could easily derail the process. The Commission must not become complacent and allow these issues to fester to the point that they threaten the success of the auction and the corresponding public interest benefits. Rather, the agency must continue to work diligently toward an auction that will maximize the amount of spectrum transferred for mobile broadband use and the value of that spectrum to consumers.

¹ Pursuant to the Public Notice issued on December 18, 2012 (DA 12-2040), these comments represent the views of a coalition of broadcasters who own or have financial interests in more than 85 auction-eligible stations and who desire to remain anonymous at this time. Together, the Coalition members own both full power and Class A television stations in a number of markets, including stations in eight of the ten largest DMAs. The individual members of the Coalition may not agree with all positions taken in these comments. The Coalition’s name and mailing address are provided in accordance with Section 1.419 of the Commission’s rules. See 47 C.F.R. § 1.419(d).

² See *In the Matter of Broadcast Incentive Auction Comment Public Notice Auction 1000, 1001 and 1002; Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, AU Docket No. 14-252 & GN Docket No. 12-268, FCC 14-191 (rel. Dec. 17, 2014) (“*Comment PN*”).

Specifically, the FCC must not allow further delay to disrupt the auction's progress. Broadcasters and wireless providers alike are increasingly focused on the auction, and the Commission should do everything in its power to seize that momentum. This requires more than just completing the many ongoing proceedings currently pending before the agency: it also requires adopting policies that convert interest into action and that avoid needless litigation that could cast a cloud of uncertainty over the auction and its results.

Not only must the FCC move quickly, but it must move wisely. The Commission must continue to focus on adopting procedures that both encourage broadcaster participation and promote the value of reclaimed spectrum. Pricing remains the primary determinant of whether broadcasters will participate in the auction in sufficient numbers. As many broadcasters (and other commenters) have made clear, simply throwing out high prices is not sufficient if those prices either are not attainable or if the path to obtaining those prices is fraught with uncertainty. To address these concerns, the FCC must simplify the procedures for everything from setting the initial clearing target to reserve pricing to participating in the auction. The Commission must focus not only on reclaiming a large volume of broadcast spectrum, but also on reclaiming the most valuable spectrum by setting a clearing target that prioritizes maximizing unimpaired spectrum in key markets. It must also remove or replace dynamic reserve pricing ("DRP"). DRP is a key source of broadcaster anxiety. If left unchanged, DRP will simultaneously ensure that the FCC's price offers to broadcasters are illusory while also creating unnecessary impairment that will destroy the value of spectrum sold in the forward auction. Finally, the Commission must substantially increase broadcaster visibility into the reverse auction.

Revising the proposed formula for calculating broadcaster starting prices, substituting RZR for DRP, and increasing the transparency of the reverse auction will generate more

broadcaster enthusiasm and reduce the number of potential legal obstacles to achieving the FCC's goal of conducting the Incentive Auction in 2016. The Commission should adopt these and the other recommendations set forth in the Coalition's opening comments and described in further detail below.

I. ANY DEVIATION FROM THE FCC'S CURRENT AUCTION TIMELINE WOULD BE UNJUSTIFIED AND HAVE POTENTIALLY DISASTROUS CONSEQUENCES.

The record overwhelmingly supports the conclusion that the Commission should not depart from its plan to accept broadcaster registrations this year and commence the auction in Early 2016. The Commission has already twice delayed the Incentive Auction: first from 2014 to mid-2015 and then to the current plan of Early 2016.³ Any further delay would be unwarranted and costly.

First, there is no basis to delay the auction. As a result of the herculean efforts of the FCC and its Staff, the multitude of proceedings that must be resolved before the auction are all on track to be completed by the end of this year. Additionally, concerns about the wireless industry's capacity to support another auction are misplaced. Wireless carriers have both the incentive and the ability to secure an abundance of capital to bid for the superior spectrum that will be available in the Incentive Auction.⁴ In fact, the record reflects a consensus among

³ Dec. 2013 Blog Post (expressing support for "a successful auction in the middle of 2015"); Gary Epstein, *Incentive Auction Progress Report*, Official FCC Blog (Oct. 24, 2014) (announcing plans to "accept[] applications for the auction in the fall of 2015 and start[] the auction in early 2016").

⁴ See Kagan Media Appraisals, *Can the FCC Attract a Full House for the 2016 Broadcast Incentive Auction?* (Feb. 11, 2015) ("Kagan White Paper"), Exhibit A to Comments of Expanding Opportunities for Broadcasters Coalition, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 19, 2015) ("EOBC Comments"); The Brattle Group, *On Track: Benefits from the Incentive Auction 5* (Feb. 20, 2015) ("Brattle Report"), attached to Comments of LocusPoint Networks, LLC, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015) ("LPN Comments").

respected experts that a forward auction in 2016 will generate a minimum of \$60-80 billion—and perhaps significantly more.⁵

Moreover, the cost of delay would be substantial. The spectrum that the FCC will be auctioning in the Incentive Auction originally was slated for reallocation by 2015.⁶ According to a study by The Brattle Group, any further delay in the auction “will defer deployments into the future, resulting in lost revenue and consumer welfare [that] quickly add[s] up and could easily approach \$200 billion.”⁷ The record makes clear that this concern is particularly acute for small and rural wireless providers, which will be able to use 600 MHz spectrum to expand their coverage and “ensure that consumers in the most rural areas can have access to the most up-to-date fixed and mobile wireless broadband applications.”⁸ Accordingly, the public interest demands conducting the auction in accordance with the current timeline, and the Commission should do everything within its power to facilitate this result.

II. THE COMMISSION’S PROPOSED PRICING POLICIES MUST BE MODIFIED TO REFLECT THE VALUE OF BROADCAST SPECTRUM.

The initial comments establish that the FCC’s proposed pricing policies will not produce market-based prices for broadcasters. As an initial matter, numerous commenters agree that the formula the Commission has proposed to calculate each station’s volume does not properly account for its “impact on the repacking process,” as required by the *Incentive Auction R&O*.

⁵ Kagan White Paper at 8 (estimating that 600 MHz auction receipts “could well be in the \$60-80 billion range”); Brattle Report at 12-13 (projecting average forward auction prices of at least \$2.00 MHz-pop, resulting in total revenue of \$62 billion); Peter Cramton, Hector Lopez, David Malec, and Pacharasut Sujarittanonta, *Design of the Reverse Auction in the FCC Incentive Auction 20* (Feb. 19, 2015) (“Cramton Expert Report I”), EOBC Comments, Ex. B (projecting that revenue for 10 blocks of 600 MHz spectrum should be at least \$84.9 billion).

⁶ EOBC Comments at 9 (citing FCC, *Connecting America: The National Broadband Plan* 84, 88-93 (2010), available at <http://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf>).

⁷ Brattle Report at 5.

⁸ See Comments of Rural Wireless Association, Inc. and NTCA – The Rural Broadband Association, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015) (“RWA-NTCA Comments”), at 6 (“Small and rural wireless providers represented by the Associations are preparing for an early 2016 auction and any delay will substantially and negatively impact business plans and opportunities.”).

The comments include a number of proposed alternatives—some that would mark a radical departure from the formula proposed in the *Comment PN* and others that are more in the spirit of minor adjustments—all of which appear to be superior to the FCC’s proposal. Additionally, the commenters agree that the Commission should adopt smaller price decrements to allow for price discovery and to ensure that the prices paid to broadcasters better reflect market outcomes.

The FCC’s proposed volume metric includes two equally weighted components—the population within a station’s interference-free service contour and the count of stations with which a station cannot be repacked on a given channel. A number of commenters echoed the EOBC’s concern about the weight that the Commission’s formula places on the population that a station serves over-the-air.⁹ As the Coalition explained in its opening comments, the interference-free population covered by a station’s contour has nothing to do with the station’s ‘impact on the repacking process.’”¹⁰ In fact, the population component actually harms consumer welfare by needlessly increasing the amount of over-the-air broadcast television service lost to achieve the same spectrum reallocation.¹¹

Perhaps more importantly, the FCC’s proposed formula is less robust and increases the chance that the Commission will not be able to repurpose the most efficient amount of spectrum

⁹ See Comments of Local Media TV Holdings, LLC, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 19, 2015) (“LMTV Comments”), at 7 (“By attaching undue weight to Interference-free POPs, the agency risks paying some stations unnecessarily and having harder-to-repack stations drop out prematurely.”); LPN Comments at 5-7 (“Adopting the proposed formula, which gives equal weight to the population factor, will lead to a less efficient auction in which the Commission [has] to pay higher prices to stations with lesser repacking impacts.”); Comments of Marquee Broadcasting, Inc., AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015), at 4 (“The value of interference outweighs the value of the population.”); Comments of Milachi Media, LLC, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015) (“Milachi Comments”), at 2-4 (“There simply is no evidence of any correlation between the population served by a station and its impact on the repacking process.”); Comments of Trinity Broadcasting Network, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015) (“TBN Comments”), at 3 (“The key determinant for a station’s value should be its impact on the repacking process. Giving equal weight to a covered population factor can lead to the anomalous result of assigning a higher relative value to a station with a lesser repacking impact merely because it happens to cover a larger population.”).

¹⁰ EOBC Comments at 19-20.

¹¹ *Id.* at 25-26.

that market demand will support. Updated simulations performed by The Cramton Team confirm that “higher opening and RZR prices greatly increase the likelihood of a successful auction.”¹²

Several commenters encourage the FCC to abandon the population metric altogether.¹³ LMTV offers, as an alternative, an approach based on the “relative domain file” for a station.¹⁴ This method, like the “freeze probability” method proposed by the Coalition, flows directly from the FCC’s constraint files. Nevertheless, the updated analysis by The Cramton Team found that “freeze volume did not perform significantly better than reweighted volume,”¹⁵ and we would expect a similar result from LMTV’s domain approach. Accordingly, although the Coalition believes that either approach is superior to the proposal in the *Comment PN*, the Commission could achieve a similar result by simply rebalancing its formula as proposed in the EOBC Compromise Proposal.

The EOBC Compromise Proposal permits the FCC to preserve the fundamental structure of its proposed formula—including the use of a population component—while still using a formula that is more consistent with the policies adopted in the *Incentive Auction Report & Order* and that produces more desirable results. As the Coalition explained, “[b]y rebalancing the volume inputs, the EOBC Compromise Proposal places a greater emphasis on how a station affects ‘the availability of channels in the repacking process and, therefore, the value of a station’s bid to voluntarily relinquish spectrum usage rights.’”¹⁶ Moreover, the EOBC

¹² Peter Cramton, Hector Lopez, David Malec, and Pacharasut Sujarittanonta, *Design of the Reverse Auction in the FCC Incentive Auction* 10 (Mar. 12, 2015) (“Cramton Expert Report II”).

¹³ See LMTV Comments at 7; LPN Comments at 5-7; Milachi Comments at 2-4.

¹⁴ LMTV Comments at 6-7.

¹⁵ See Cramton Expert Report II at 39.

¹⁶ EOBC Comments at 25 (quoting *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd. 6567 ¶ 450 (2014) (“*Incentive Auction R&O*”)).

Compromise Proposal will increase the likelihood that the Commission will receive enough volunteers to maximize spectrum reallocation while minimizing the loss of broadcaster coverage.¹⁷

To further improve the robustness of the auction, the agency should also increase the base block price to better reflect the unmistakable price signals from the AWS-3 auction.¹⁸ The Coalition supports an increase from the current base clock price of \$900 to somewhere between \$1,100 and \$1,500. The record also supports the Coalition's proposals to adopt bid increments of one percent per round.¹⁹

III. THE COMMISSION SHOULD MODIFY ITS CLEARING TARGET AND RESERVE PRICING PROCEDURES TO PRIORITIZE REALLOCATION OF UNIMPAIRED SPECTRUM IN THE LARGEST MARKETS, WHERE SPECTRUM HAS THE GREATEST VALUE.

Broadcaster and wireless commenters alike expressed grave concerns both about the amount of impairment that the FCC is proposing to accept in the new 600 MHz band and the manner in which that impairment is created. Although commenters disagreed about the appropriate level of impairment, they were uniform in the belief that the 20 percent impairment threshold proposed by the Commission is too great and could harm broadcasters while, at the same time, devaluing the spectrum that the FCC is attempting to reallocate. Commenters were particularly troubled by the Commission's proposal to use "dynamic reserve pricing" as a blunt tool to drive down broadcaster prices and, in the process, create potentially substantial amounts of additional impairment.

¹⁷ *Id.* at 25-26.

¹⁸ *See id.* at 26-27; Comments of National Association of Broadcasters, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015) ("NAB Comments"), at 2 (encouraging the Commission to "consider incorporating the results of that auction in its opening bid prices").

¹⁹ *See* LPN Comments at 11 (recommending "a price decrement of no higher than one percent per round"); TBN Comments at 5-6 (observing that even a three percent decrement "will force broadcasters – many of whom are not experienced in participating in FCC auctions – into making momentous decisions on whether to accept large reductions in price offers, especially in the early rounds of the reverse auction").

When discussing impairment, it is important to distinguish between *necessary* impairment and *artificial* impairment. As the Coalition explained in its opening comments, these two forms of impairment are not created equal.²⁰ If the Commission pursues maximum spectrum reallocation in the two largest markets—New York and Los Angeles—some impairment is inevitable elsewhere. This *necessary impairment* is the result of domain constraints that apply to only a limited number of stations as a result of border or other issues. The only alternative to this necessary impairment is a lowest common denominator clearing target that would allow one constrained market to dictate spectrum reallocation nationwide, leaving a substantial amount of spectrum “on the table” in the largest markets, where demand for wireless spectrum is the greatest. The procedures that the FCC adopts in this proceeding should not allow the benefits of spectrum reallocation to be so constrained. Instead, the Commission should focus on reducing *artificial impairment* by reallocating as much unimpaired spectrum as possible in the markets where it is valued the most. This approach will maximize consumer welfare and spectrum value nationwide.

A. The Commission Should Adopt a Near-National Clearing Target That Optimizes Spectrum Reallocation in Key Markets.

Several commenters express concern that the FCC’s proposal to set the initial clearing target based on a nationwide impairment threshold will create an unacceptable level of impairment.²¹ These comments emphasize two central themes: (1) that the procedure proposed

²⁰ EOBC Comments at 29.

²¹ See, e.g., Comments of AT&T, Inc., AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015) (“AT&T Comments”) at 21-24, 26 (explaining that the proposed 20 percent threshold is both undesirable and arbitrary); Comments of Media General, Inc., AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015), at 5 (“The proposed 20-percent encumbrance standard will lead to far too many TV stations in the 600 MHz band and far too much encumbered spectrum that is of limited utility to wireless carriers.”); Milachi Comments at 6 (“If 20 percent of the U.S. population is left out of the ‘near-nationwide’ standard, there is the distinct possibility that many potential bidders will be unwilling to participate”); Comments of Verizon, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015), at 6, 17 (stating that “the complex impairment proposal in the Public Notice would add substantial uncertainty to the forward auction and is inherently arbitrary”).

in the *Comment PN* is overly-complicated and requires selecting an arbitrary amount of “acceptable” impairment; and (2) that any impairment is potentially harmful and should be limited. The Coalition agrees with both of these concerns and believes that they can be addressed by setting the initial clearing target based on the maximum amount of unimpaired spectrum reallocation that can be achieved in the greater of New York or Los Angeles—the two markets that are likely to serve as the focal points for spectrum reallocation nationwide. This approach will maximize spectrum reallocation without harming TV translators. At the same time, the Commission must also limit impairment to forward auction licenses to ensure that they are packaged in a way that maximizes their value to wireless providers.

1. Optimizing the Clearing Target to Key Markets Will Maximize Consumer Welfare.

The parties in the best position to understand how to maximize spectrum value in the forward auction—the wireless carriers—generally agree that while reducing impairment is important, it should be secondary to maximizing the amount of spectrum reallocated in the markets where it is valued most. For example, CTIA—The Wireless Association (“CTIA”) urges the Commission to focus on ensuring that major markets are not overly impaired and to differentiate cross-border impairments from other license impairments.²² Similarly, the Competitive Carriers Association (“CCA”) observes that carriers “will need access to spectrum in multiple major markets not only to benefit from the volume purchasing, reduced operating expenses, and increased operational efficiency associated with carrier-specific economies of scale, but also to consistently meet consumer performance expectations for wireless broadband

²² Comments of CTIA—The Wireless Association, AU Docket No. 14-252, GN Docket No. 12-268 at 6 (Feb. 20, 2015).

service.”²³ AT&T and Verizon acknowledge that impairment resulting from domain constraints should not serve to limit the amount of spectrum reallocated in major markets.²⁴ T-Mobile, meanwhile, calls for the Commission to “choose the initial clearing target that will maximize the number of licenses in the top 10 markets by value-weighted pops.”²⁵ Notably, none of these parties support the Commission’s proposal to “favor an initial channel assignment with at least a minimum level of vacancy in the broadcasting portion of the band.”²⁶ Instead, CTIA urges the FCC not to skip any clearing targets.²⁷

A number of commenters propose attempting to minimize impairment in major markets by adjusting, rather than replacing, the FCC’s proposed weighted-pops approach.²⁸ The problem with any approach based on weighted-pops, however, is that it starts from the flawed premise that all impairment is equal, and that reducing impairment generally should be the Commission’s primary goal. As explained above, however, not all impairment is created equal. Additionally, as CTIA notes:

Based on the way the Commission has proposed to weight license impairments, every license in the New York and Los Angeles PEAs could be impaired, and yet the 20 percent target would not be reached. This is because the Commission has proposed to calculate impairments on a block-by-block basis, as opposed to an overall market population basis.²⁹

²³ Comments of Competitive Carriers Association, AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015), at 11-12.

²⁴ AT&T Comments at 21-24, 26 (distinguishing between impairment in “markets that are particularly important to the success of the auction, like New York” and other markets); Verizon Comments at 6-7, 17 (recognizing that impairment along with borders with Canada and Mexico may require different treatment).

²⁵ Comments of T-Mobile USA, Inc., AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015), at 16, 21.

²⁶ *Comment PN* ¶ 45.

²⁷ CTIA Comments at 16.

²⁸ *See* Comments of Cellular South, Inc. (d/b/a C Spire), AU Docket No. 14-252, GN Docket No. 12-268 at 16, 21 (Feb. 20, 2015), at 2-3; CCA Comments at 8-9; NAB Comments at 6-7; T-Mobile Comments at 20.

²⁹ CTIA Comments at 7 (citing Federal Communications Commission, LEARN Webinar, “Integrating the Forward and Reverse Auctions” at 9 (Jan. 23, 2015), *available at* http://wireless.fcc.gov/incentiveauctions/learn-program/Integration_Webinar_Slides.pdf).

Even at thresholds as low as three percent or ten percent, there still remains the risk of unnecessarily impairing spectrum in markets where there is both adequate supply and demand to avoid impairment. Where there is sufficient carrier demand and revenue, the FCC should not impair spectrum just to save a few dollars in clearing cost.

The Coalition's proposal, which would set the initial clearing target based on the maximum amount of spectrum that can be reallocated in the greater of the New York or Los Angeles partial economic areas (PEAs), is simpler, more transparent, and ensures that the clearing target will maximize spectrum value nationwide.³⁰ New York and Los Angeles are selected because they almost always will serve as the bottlenecks to additional clearing on their respective coasts.³¹ Additionally, this approach would focus solely on unimpaired spectrum; even if the FCC could achieve a higher clearing target by selling impaired licenses in the target-setting PEA, it would decline to do so.³²

The Coalition's proposal increases the likelihood that the Commission will be able to achieve its goal of reallocating at least 126 MHz on a near-nationwide basis. This goal has its roots in the National Broadband Plan and has served as a central assumption in the FCC's auction analysis, including the derivation of the Greenhill price estimates presented to broadcasters and the auction simulations that the Commission has conducted.³³ Moreover, as

³⁰ EOBC Comments at 29-31.

³¹ See Cramton Expert Report I at 40 ("The approach recognizes that the clearing target, and hence the nationwide band plan, almost always is limited by participation levels in New York and Los Angeles.").

³² For a detailed description of the EOBC's proposal for optimizing the clearing target, see Appendix to Cramton Expert Report II at A-11.

³³ See Greenhill & Co., LLC, *Incentive Auction Opportunities for Broadcasters* 30-35 (Oct. 2014), available at <http://wireless.fcc.gov/incentiveauctions/learn-program/docs/ia-opportunities-book.pdf> (explaining that he estimates assume a 126 MHz clearing target, with 100 MHz of available spectrum for the forward auction); Appendix to Public Notice, *Incentive Auction Task Force Releases Updated Constraint File Data Using Actual Channels and Staff Analysis regarding Pairwise Approach to Preserving Population Served*, DA 14-677 (rel. June 2, 2014) (stating that simulations were run using 120 MHz and 84 MHz clearing targets).

The Cramton Team explains, the ten block scenario that results from a 126 MHz clearing target “is especially desirable from a competition and revenue perspective” because it will lead to a 7-3 split between unreserved blocks and reserved blocks.³⁴ Not only is 126 MHz desirable, but it also is achievable. As The Cramton Team explains in the attached update to its Expert Report, maximizing spectrum clearing in New York and Los Angeles creates a high probability of achieving 126 MHz.³⁵

Nevertheless, Cohen, Dippell, and Everist, P.C. (“CDE”) urge the FCC to focus on an 84 MHz clearing target to minimize what it calls “lost spectrum.”³⁶ While CDE is correct that the ratio between recovered spectrum and auctioned spectrum decreases at higher clearing targets, this is only part of the story. The Cramton Team conservatively estimates that the incremental value of each 5+5 MHz block of spectrum will be \$8.49 billion, with a flat demand curve for clearing targets between 84 MHz and 126 MHz.³⁷ Thus, if the cost to reallocate an additional 5+5 MHz block is less than \$8.49 billion, it is still economically justified. Moreover, CDE ignores the consumer welfare that comes from clearing additional spectrum. In the *Incentive Auction R&O*, the FCC recognized that allocating additional spectrum for unlicensed use will “result in greater innovation in new devices and services, including increased access for broadband services across the country.”³⁸ Thus, under the Commission’s expressed policy preferences, any additional unlicensed spectrum created by increasing clearing targets beyond 84 MHz will create an added benefit that cannot be measured solely by auction revenue alone.

³⁴ Cramton Expert Report I at 24.

³⁵ Cramton Expert Report II at 13, 47.

³⁶ Comments of Cohen, Dippell, and Everist, P.C., AU Docket No. 14-252, GN Docket No. 12-268 at 2-3 (Feb. 20, 2015).

³⁷ Cramton Expert Report I at 24.

³⁸ *Incentive Auction R&O* ¶ 464 (2014).

Accordingly, the Commission should adopt the Coalition’s proposal to set the initial clearing target based on the maximum amount of unimpaired spectrum that can be reallocated in either New York or Los Angeles, with a goal of reallocating at least 126 MHz on a near-nationwide basis.

2. Optimizing the Clearing Target to Key Markets Will Not Harm TV Translators.

The Coalition’s proposal to set the national clearing target based on the maximum amount of spectrum available for reallocation in New York or Los Angeles would not require the appropriation of any spectrum in markets where it is not needed. This should address concerns about unnecessarily forcing TV translator stations off the air through repacking.³⁹ Moreover, as the Coalition has explained, the risk of harm to TV translators is overstated.⁴⁰ Under the reverse auction and repacking policies adopted by the FCC, the Commission will not reclaim more spectrum than it needs in rural areas.⁴¹ In the markets where broadcasters most depend on TV Translators, there would be ample spectrum post-repack on which TV translators could continue to operate.⁴²

3. The Commission Should Limit Impairment to Forward Auction Licenses.

One of the primary reasons to minimize impairment is to maximize the value of the licenses that the Commission will be auctioning in the forward auction. Although reducing the number of broadcasters placed in the 600 MHz band will contribute to value maximization, the

³⁹ See NAB Comments at 7-11.

⁴⁰ See Letter from Preston Padden to Marlene H. Dortch (Nov. 23, 2013), available at <http://apps.fcc.gov/ecfs/document/view?id=7520959122> (“Nov. 2013 Ex Parte”).

⁴¹ See Ruth Milkman, *A Band Plan that Serves the Public Interest*, Official FCC Blog (June 21, 2013), <http://www.fcc.gov/blog/band> (explaining that the FCC is “looking for a consistent amount of spectrum in the vast majority of the country – there may be less in constrained markets, but we aren’t contemplating clearing more in rural markets”).

⁴² Nov. 2013 Ex Parte at 3 (demonstrating that even at a 120 MHz clearing target, there will be ample spectrum remaining for existing TV translators).

FCC must also ensure that it packages the licenses in a manner that enhances their value to forward auction bidders. Unfortunately, the Commission’s proposal to auction generic “Category 1” licenses, including any licenses with up to 15 percent impairment, and additional “Category 2” licenses, with up to 50 percent impairment, will detract from this goal. As AT&T explained, there are two reasons why the proposed Category 1 licenses are not truly fungible: (1) they do not distinguish between areas of incoming interference, where a wireless operator can continue to operate, and “exclusion zones,” where they cannot; and (2) they do not account for the location of the impairment.⁴³ This issue will affect both reserve-eligible bidders and non-reserve-eligible bidders alike.⁴⁴ Moreover, according to Verizon, impairment to greater than 15 percent of the population “could prevent service to either one or more cities in the PEA, or to broad swaths of suburban and rural areas.”⁴⁵

The Commission should properly account for wireless industry concerns about how impairment will de-value 600 MHz licenses. Although the Coalition expects that demand for beachfront 600 MHz spectrum will exceed the demand seen in the recent AWS-3 auction, the FCC must not put a damper on that demand by auctioning licenses in a way that does not allow bidders to properly account for the value of each license.

B. The Commission Should Either Abandon Reserve Pricing Altogether or Replace Dynamic Reserve Pricing with Round Zero Reserve.

If one thing is abundantly clear from the initial comments, it is that DRP must go. Commenters almost all agreed with the Coalition that DRP is an “unnecessarily complex proposal to solve a very narrow ‘problem’ that could have devastating effects on the Incentive

⁴³ See AT&T Comments at 19-20.

⁴⁴ See Comments of Sprint. Corp., AU Docket No. 14-252, GN Docket No. 12-268 (Feb. 20, 2015), at 45 (explaining that “reserve-eligible bidders” will not know where the blocks are in the band plan or the extent of impairments within Category 1 blocks).

⁴⁵ See Verizon Comments at 8.

Auction.”⁴⁶ The well-deserved “demonization” of DRP reflects the realization by broadcasters and wireless carriers alike that the FCC’s proposal is irreparably flawed. Even if there is the need for some control on prices paid to broadcasters (above and beyond the opening prices set by the Commission), a round zero reserve offers a more simple and welfare-maximizing way to address the agency’s concerns.

1. The Commission’s DRP Proposal is Irreparably Flawed.

There are a number of reasons why the FCC’s DRP proposal is flawed beyond repair. First, the need for DRP is not by any means clear. The Commission’s explanation—that it will prevent the FCC from having to “overpay” any broadcaster—assumes, without justification, that the agency’s price offers will be too high until the interference threshold is reached, at which point the prices suddenly will become just right. Yet, as NAB observes, the FCC already has determined that “all participants in the reverse auction will compete to receive incentive payments from the same limited source—the aggregate proceeds of the forward auction.”⁴⁷ It follows that the protections that the Commission built into the auction design—including closing conditions and the use of a volume factor to calculate broadcaster prices—ensure that no broadcaster will receive more than the market value for its spectrum. The FCC’s apparent unwillingness to pay a price for spectrum at which the supply lags demand is contrary to its commitment to conduct a market-driven auction. As the Coalition explained in its opening comments, in all but a few limited scenarios (mostly along the borders), the need to pay a station its opening price comes from the fact that the FCC is offering *too little* for comparable spectrum, not too much, as DRP inherently assumes.⁴⁸

⁴⁶ EOBC Comments at 32.

⁴⁷ NAB Comments at 3-4 (quoting *Incentive Auction R&O* ¶ 414).

⁴⁸ EOBC Comments at 33.

Second, DRP is unnecessarily complex and undermines transparency and price discovery. Many of the most esteemed auction design experts agree that DRP is “inscrutable to all but those with advanced mathematical training.”⁴⁹ Broadcasters and wireless providers of all types find that DRP is a black box that will discourage broadcaster participation by inexplicably and unpredictably driving down broadcaster prices.⁵⁰

Third, DRP creates unnecessary impairment, which will destroy spectrum value. Even the sole party that expresses any support for DRP acknowledges that “the use of DRP involves substantial costs” by “introduc[ing] more encumbered spectrum into the 600 MHz band than carriers might desire.”⁵¹ This is an understatement. As many participants have recognized, DRP not only invites, but requires, additional impairment.⁵²

The few remaining arguments that CCA makes in favor of DRP are unconvincing. First, CCA argues that, absent DRP, a station could receive a higher amount than it is willing to accept.⁵³ Yet, “the amount that the station would have been willing to accept” is irrelevant under the FCC’s reverse auction design, and for good reason. As the Commission has recognized, it is

⁴⁹ Philip A. Haile, Michael Kearns, and Lili Dworkin, *Comments on the FCC’s Current Incentive Auction Design Proposals* 4 (Feb. 20, 2015) (“Haile, Kearns, & Dworkin”), attached to AT&T Comments; *see also* Cramton Expert Report at 41 (explaining that the FCC “has yet to provide a specification for DRP together with required data to simulate it”).

⁵⁰ AT&T Comments at 42 (explaining that DRP “would add considerable complexity to the reverse auction for broadcasters”); LPN Comments at 7 (“DRP introduces unnecessary complexity and uncertainty into the reverse auction and suppresses broadcaster participation.”); Comments of Media General, Inc., AU Docket No. 14-252, GN Docket No. 12-268 at 3 (Feb. 20, 2015) (expressing that “DRP appears to be nothing more than a convenient tool for artificially reducing auction prices below those the descending clock auction would natural produce” and “will significantly discourage auction participation”); Comments of Milachi Media, LLC, AU Docket No. 14-252, GN Docket No. 12-268 at 5 (Feb. 20, 2015) (“Milachi Comments”) (stating that DRP “serves only to add complexity, lessen broadcaster interest and add a layer of mistrust into an” auction process that the Commission already has made far too convoluted”); NAB Comments at 3 (“This complex and unnecessary mechanism has already made broadcasters suspicious that the Commission does not intend to let them realize gains from market prices.”); TBN Comments at 3 (“By its inherent nature, DRP would introduce unnecessary complexity and uncertainty into the reverse auction and suppress broadcaster participation.”).

⁵¹ CCA Comments at 14.

⁵² AT&T Comments at 42; Haile, Kearns & Dworkin at 25-26 (observing that “DRP ensures that further impairments will be generated”); Media General Comments at 3.

⁵³ *See* CCA Comments at 13.

buying spectrum, not going broadcast interests.⁵⁴ Moreover, as even CCA acknowledges, in this first ever reverse auction of broadcast spectrum, broadcasters have little on which to base the “market” price for their spectrum.⁵⁵ Thus, some broadcasters might only be willing to accept their opening price—particularly given the value of their stations to the repacking. Second, CCA’s argument that DRP will not “trick broadcasters” is a straw man.⁵⁶ Contrary to CCA’s characterization, the undersigned has never suggested that DRP will trick broadcasters. What the Coalition has argued, and what is true, is that DRP is a “clever trick” for the FCC in that it creates a broad exception that will swallow the rules that the Commission already has adopted for the conduct of the auction. Just because broadcasters will either enter the auction or choose to forego the auction with their eyes wide open about DRP does not make it appropriate or desirable. As one commenter explained, “DRP would act like a sledgehammer when a scalpel is more appropriate.”⁵⁷

2. If the Commission Adopts Any Reserve Mechanism, It Should Adopt the Coalition’s Round Zero Reserve Proposal.

The overwhelming opposition to DRP and the underlying problems on which this concern is based leave the FCC with two choices; it can either: (i) abandon reserve pricing altogether; or (ii) adopt an alternative that is more predictable, more transparent, and less destructive of spectrum value. The Coalition has offered such an alternative in the form of a round zero reserve (“RZR”).⁵⁸

⁵⁴ See *Incentive Auction R&O* ¶ 451 (“We emphasize that we do not intend to set prices to reflect the potential market or enterprise value of stations, as opposed to their impact on the repacking process.”).

⁵⁵ See CCA Comments at 13 (recognizing the importance of providing “flexibility to conduct price discovery on broadcast supply curves that are, at best, poorly understood”).

⁵⁶ *Id.* at 14.

⁵⁷ TBN Comments at 4.

⁵⁸ For a detailed description of the RZR proposal, see Appendix to Cramton Expert Report II at A-11-14.

As the Coalition explained in its opening comments, RZR is superior to DRP in all respects: it is simpler, it is more predictable, and it would maximize public welfare by transferring the greatest amount of spectrum to its most valued use.⁵⁹ After comparing DRP to RZR, TBN concluded that RZR “would add certainty, and uncomplicate[] the auction process by reducing the number of rounds.”⁶⁰

In fact, RZR provides all of the benefits touted by CCA for DRP without the “substantial costs.” With RZR, the Commission could still offer higher opening prices to broadcasters, with the resulting increased broadcast participation.⁶¹ At the same time, RZR would eliminate any theoretical risk that “a select few broadcasters” will “reap[] a windfall benefit based solely on external factors.”⁶² Instead the FCC would establish, in advance of the auction, a formula for measuring an acceptable ceiling price for each broadcast station. The Commission could still offer higher prices, and those prices would be attainable by any broadcaster not frozen in round zero (subject to the market forces of the auction).

The sole remaining question, then, is how to set RZR prices. The Coalition continues to evaluate a number of possibilities for RZR pricing. One promising approach would use the Greenhill-based value for each station’s DMA, scaled so the RZR price of the max-score station is equal to that station’s opening price. Another option would consider the expected forward auction spectrum value and the population that a broadcast station would block from service by other users. The Coalition will continue to evaluate these and other alternatives and submit further data about RZR pricing as soon as it is available.

⁵⁹ EOBC Comments at 37-38.

⁶⁰ TBN Comments at 4 & n. 6.

⁶¹ *See* CCA Comments at 13.

⁶² *See id.* at 16.

Finally, although other proposals to remedy DRP are superior to the FCC's proposal, they still lack the simplicity, predictability, and spectrum maximizing potential of RZR. For example, the NAB's proposal to lower the impairment threshold to three percent,⁶³ while resulting in less impairment than the Commission's 20 percent threshold, still would result in artificial impairment that unnecessarily destroys spectrum value. Additionally, merely changing the DRP threshold does not address DRP's lack of simplicity or predictability. As a result, the NAB's proposal still could deter, or at the very least complicate, broadcaster participation. The Commission should instead abandon DRP altogether and replace it with RZR.

IV. THE COMMISSION SHOULD INCREASE THE TRANSPARENCY OF THE REVERSE AUCTION TO PROVIDE PRICE DISCOVERY AND INSPIRE BROADCASTER CONFIDENCE.

Commenters universally agree that transparency is critical to obtaining maximum broadcaster participation in the reverse auction. This transparency can take two forms. First, several commenters agree with the Coalition that the proposed auction procedures must be simple and predictable. As renowned economist Philip Haile and computational expert Michael Kearns observe in a paper submitted by AT&T, Inc., "if the origins and rationale for [price offers to broadcasters] are inscrutable, as are the detailed consequences of rejecting them . . . broadcaster participation may be reduced."⁶⁴ Second, the FCC must provide enough information to broadcasters during the reverse auction to contribute to price discovery and reinforce broadcaster confidence in the auction process.⁶⁵

⁶³ See NAB Comments at 2-6.

⁶⁴ Haile, Kearns, & Dworkin at 4-5; see also Comments of National Association of Broadcasters, AU Docket No. 14-252, GN Docket No. 12-268 at 1-3 (Feb. 20, 2015) ("NAB Comments") (calling on the FCC "to simplify its overly and unnecessarily complex auction procedures").

⁶⁵ See Comments of Local Media TV Holdings, LLC, AU Docket No. 14-252, GN Docket No. 12-268 at 2-6 (Feb. 20, 2015) ("LMTV Comments") ("Broadcasters must have confidence in their ability to make informed reasoned decisions about the price they will accept for their spectrum."); Comments of Sinclair Broadcast Group, Inc., AU Docket No. 14-252, GN Docket No. 12-268 at 6 (Feb. 20, 2015) ("Sinclair Comments"); Comments of

Unfortunately, there is also widespread agreement that the procedures proposed in the *Comment PN* fail in both regards. Haile, Kearns, & Dworkin conclude that “the overall effect of [the FCC’s proposals in areas like the initial clearing targets, DRP, and reverse auction pricing] is to make the reverse auction much more difficult for all parties to understand.”⁶⁶ They go on to state that, “From the choice of initial prices (based on formulae that are not justified or explained and have important flaws), to the potential exceptions to frozen bids introduced by [DRP], to the virtual impossibility for a broadcaster to determine post-auction channel assignment in the case of repacking — the net effect is opaqueness and complexity.”⁶⁷ Similarly, Sinclair argues that complex procedures like DRP “will only sow distrust of the auction among broadcasters and discourage participation.”⁶⁸

Several commenters agree that the agency must provide greater transparency during the auction.⁶⁹ As the Coalition explained in its opening comments, to achieve a level of transparency that breeds confidence among broadcasters and facilitates outcome discovery, the Commission should: (1) publicly announce in advance of the auction the opening price and (if different) the reserve price for every auction eligible station; (2) announce the clearing target before bidding commences in any reverse auction stage; (3) release, at the end of each round, the amount of spectrum available for reallocation in each PEA and aggregate information about the

Trinity Broadcasting Network, AU Docket No. 14-252, GN Docket No. 12-268 at 4-5 (Feb. 20, 2015) (“TBN Comments”) (“The prospect of participating in the reverse auction without access to more information than that proposed in the *Comment PN* is raising fears among broadcasters regarding their ability to effectively monitor the reverse auction and make informed decisions as the auction progresses.”).

⁶⁶ Haile, Kearns, & Dworkin at 4.

⁶⁷ *Id.*

⁶⁸ Sinclair Comments at 3.

⁶⁹ *See, e.g.*, LMTV Comments at 2-5 (encouraging the Commission to “provide as much information as possible” during the reverse auction); TBN Comments at 4-5 (“The prospect of participating in the reverse auction without access to more information than that proposed in the *Comment PN* is raising fears among broadcasters regarding their ability to effectively monitor the reverse auction and make informed decisions as the auction progresses.”).

number of stations that registered, were “frozen,” or remain active; (4) if the Commission adopts its DRP proposal, publicly announce when DRP has been turned off; (5) provide, on a round-by-round basis, anonymized information about the offers made to each station for each bid-type; (6) provide anonymized information about whether each station accepted the bid and which stations were “frozen”; (7) provide aggregate information about the actions of stations that are mutually exclusive (not compatible on one or more channels) with each participating station; and (8) provide the total amount of payments to broadcasters for bids that the FCC has conditionally accepted.⁷⁰ Given the FCC’s repeated recognition of the importance of price discovery to a market-driven auction, the Commission should only withhold this information if there is a credible reason to do so, and the burden should be on the Commission to justify withholding such information.

⁷⁰ EOBC Comments at 43-44; *see also* Sinclair Comments at 9 (urging the Commission to “ensure a competitive auction that reflects market prices by giving reverse auction bidders at least the same information regarding the market as is made available to forward auction bidders”).

V. CONCLUSION

As the foregoing and the attached Cramton Expert Report demonstrate, the FCC can conduct a wildly successful Incentive Auction that meets or exceeds all of the Commission's statutory and policy goals. To achieve this result, however, the agency must do more to increase broadcaster enthusiasm for the auction and ensure that any spectrum that is reallocated is done so in a manner that maximizes consumer welfare. The Coalition not only has provided proposals for achieving these goals, but also has provided the factual evidence to prove that they will work. Accordingly, if the FCC truly is committed to following a data-driven approach to the Incentive Auction, it must adopt the Coalition's proposals.

Respectfully submitted,

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