EXPANDING OPPORTUNITIES FOR BROADCASTERS COALITION

July 2, 2015

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

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

NOTICE OF ORAL EX PARTE PRESENTATION

Dear Ms. Dortch:

On Wednesday, July 1, 2015, the undersigned Executive Director of the Expanding Opportunities for Broadcasters Coalition (the "Coalition"), Richard Bodorff and Ari Meltzer of Wiley Rein LLP, Peter Cramton and David Malec of the University of Maryland, and a representative of the licensees of auction-eligible television stations[1] met separately with: (1) Valery Galasso from Commissioner Jessica Rosenworcel's Office; (2) Matthew Berry and Ben Sunshine (summer law clerk) from Commissioner Ajit Pai's office; (3) Incentive Auction Task Force Chair Gary Epstein and Vice Chair Howard Symons; (4) Commissioner Michael O'Rielly and Erin McGrath from Commission O'Rielly's Office; and (5) Louis Peraertz and David Strickland from the Office of Commissioner Mignon Clyburn. During each meeting, the Coalition participants addressed the issues in the attached talking points.

[1] Pursuant to the Media Bureau's February 28, 2014 public notice (DA 14-268), broadcast participants may participate in meetings with Commission staff to discuss incentive auction matters without disclosing their identities. The members of the Coalition own both full power and Class A television stations in a number of markets, including stations in several of the ten largest DMAs.

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Pursuant to Section 1.1206 of the Commission's rules, attached hereto is a copy of the written presentations that were provided at the meetings.

Respectfully Submitted,

/s/ Preston Padden /s/

Preston Padden
Executive Director
Expanding Opportunities for
Broadcasters Coalition

cc: Commissioner Michael O'Rielly
Matthew Berry
Gary Epstein
Valery Galasso
Erin McGrath
Louis Peraertz
David Strickland
Howard Symons
Ben Sunshine

EXPANDING OPPORTUNITIES FOR BROADCASTERS COALITION

Improving the Auction Procedures Public Notice

- **The Commission should reduce bidding decrements in the Reverse Auction to a fixed 1% of starting prices each round, capping the auction at no more than 100 rounds.**
- **The Commission should adopt the EOBC compromise formula for starting prices (reducing the weight of covered pops relative to interference profile), which lessens, but does not eliminate, the mispricing of more than 1100 stations.**
- **The Commission should ensure that no station's opening price is lower than its Greenhill I price (advertised as an illustration of the "economic potential" of the auction).**

Improve the scoring rule

The scoring rule plays a critical role in the auction process for two reasons. First, it sets the opening prices that motivate participation in the auction. If prices are set too low, there will be insufficient broadcaster participation and the auction will fail. Second, since in the reverse auction all prices move down in the same percentage terms, the scoring rule determines the relative prices of stations that are still active. This plays an essential role both in the sequencing of exits during the auction and in establishing the payments made to broadcasters that clear.

As discussed in the introduction, given the importance of the scoring rule to the auction process and outcome, we examined a wide variety of alternative scoring rules. In crafting alternatives, we focused on the primary objectives of efficiency, transparency, simplicity, and fairness. In the end, we settled on approaches that followed the FCC's basic structure.

The scoring rule consists of two components, the base clock price and volume, in particular:

$$\text{Score} = (\text{base clock price}) \times (\text{volume})$$

For the base clock price, we consider two alternatives in addition to the FCC price of $900: $1250 and $1500. These two base clock prices increase the FCC base clock price to encourage participation and thereby make the auction more robust to high broadcaster reservation values. In examining the costs and benefits of higher opening prices, one must recognize a large asymmetry in the costs of deviating from "optimal" opening prices. If prices are set too low, broadcasters do not participate and the auction fails; if prices are set too high, then there is a possibility that clearing costs may be slightly higher as a result of market power in one or more service areas. This implies that given the great uncertainty about the "optimal" price level, the

FCC should err on the side of higher opening prices. The FCC does the same in the forward auction—where opening prices are set at a small fraction (often 20 percent or less) of estimated final prices.

The higher base clock prices are motivated by new information, specifically the high carrier values revealed in the AWS-3 auction. At the time the FCC set the base clock price at $900, investment bankers were valuing the AWS-3 spectrum at roughly one-third of the prices in the AWS-3 auction. Thus, we now have a convincing market test that carrier values are substantially higher than we thought in the fall of 2014. This new price information warrants a significant increase in the base clock price.

Not raising the base clock price would be a strange and poor policy given this clear market signal. The AWS-3 outcome tells us that the greatest risk in the incentive auction is a shortage of broadcasters from opening prices that are too low, rather than a shortage of revenues in the forward auction.

A high base clock price greatly motivates broadcaster participation. Greater participation means more cleared spectrum and greater social welfare. Moreover, the greater participation, holding the clearing target fixed, means more competition and lower prices in the reverse auction.

A higher base clock price can be thought of as buying insurance, which protects against the possibility that some broadcasters have a high reservation value and therefore will not participate unless there is a high base clock price. What the simulation analysis will show is that this insurance is actually quite inexpensive (in terms of clearing cost) and reaps large benefits in terms of a higher probability of a successful outcome.

For volume, two measures stand out as good alternatives to the FCC volume measure. We experimented with a range of alternative volume measures, and describe two additional formulas, one which makes minimal changes to the FCC formula and one which makes substantive changes to the FCC formula, but best represents a station's preclusive effect as shown through the FCC's constraint files. We focus on these two measures and the FCC proposal in our analysis:

$$\text{FCC volume} = (\text{Broadcast population})^{1/2} \times (\text{Interference count})^{1/2}$$

$$\text{Reweighted volume} = (\text{Broadcast population})^{1/4} \times (\text{Interference count})^{1/2}$$

$$\text{Freeze volume} = (\text{Precluded population}) \times (\text{Freeze probability})$$

where

Broadcast population = a station's interference-free broadcast population. This is the FCC's population measure defined in ¶96 of the Comment PN.

Interference count = a station's count of the number of pairwise interference constraints. This is the FCC's interference measure also defined in ¶96 of the Comment PN.

Clearing cost is well within likely forward auction revenues

Our expectation is that clearing costs in the initial stage will be within forward auction revenues, so that the final stage rule will be met and the incentive auction will conclude in a single stage. Given the AWS-3 results, this is a safe expectation. Our benchmark reservation value model yields 126 MHz clearing costs of about $35 billion, even when our improvements to the scoring rule are adopted.

Figure 18 shows changes in the population loss, the clearing cost, blocks cleared, and impairment with different scoring rules for the benchmark scenario, as well as with reservation values scaled up in increments of 50% (value multipliers of 1, 1.5, and 2). For comparability, changes of population loss and clearing cost are shown relative to the FCC $900 scoring rule, holding the value multiplier fixed. This is only meaningful for when the clearing target is held constant, so these values are not shown for value multipliers above 2. With value multipliers above 2, rejections of opening prices may cause the clearing target to fall below 126 MHz. The figure illustrates how both the higher base clock price and the reweighted volume metric improve the robustness of the auction outcome—*more spectrum is cleared with fewer impairments*. This is accomplished with only a modest increase in clearing cost, even in challenging cases where reservation values are doubled.

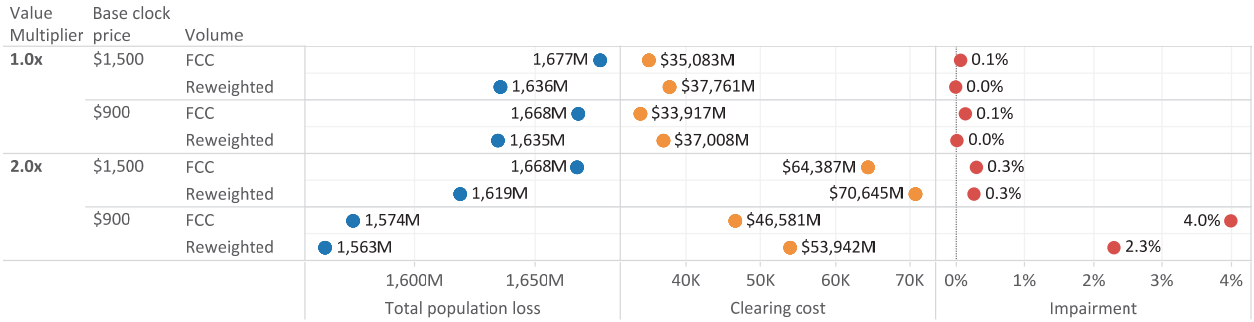


Figure 18: Population loss, clearing cost, and impairment by scoring rule

The top panel of Figure 18 shows the simulation results for alternative scoring rules in our benchmark scenario with a value multiplier of 1. Two things jump out. First, reweighting volume to put less weight on broadcast population reduces viewer loss by about 40 million (about 40 million people can enjoy one additional over-the-air channel). This should not be surprising. By rewarding population loss, the FCC volume measure "succeeds" in clearing stations with larger broadcast population. Our reweighting reduces the bias towards clearing stations with large broadcast coverage. Second, the increase in cost, which derives from reversing the price discrimination built into the FCC's volume measure as we show next, is modest. The scoring rule improvements increase clearing costs by about $2 billion out of total clearing costs of about

$35 billion—approximately 5 percent. Meanwhile, this “cost” (a voluntary transfer between two willing parties) brings large benefits. The most important benefit is the ability to robustly clear a larger quantity of spectrum. With one additional 5+5 MHz block valued at the lower-bound of $8.9 billion, it seems completely reasonable FCC policy should promote clearing the maximum quantity of spectrum.

Chicago

Both stations block every station in Chicago

Similar Contribution to Clearing Spectrum: $334 million price difference

WIFR (FacID 4689) **88% Freeze***

Covered Pops: 1.1 million

Interference Count: 118

Blocked Pops: 14.1 million

FCC Starting Price: $173 million ($2.04/MHzPOP)

EOBC Proposal: $355 million ($4.20/MHzPOP)

WTTW (FacID 10802) **12% Freeze***

Covered Pops: 9.7 million

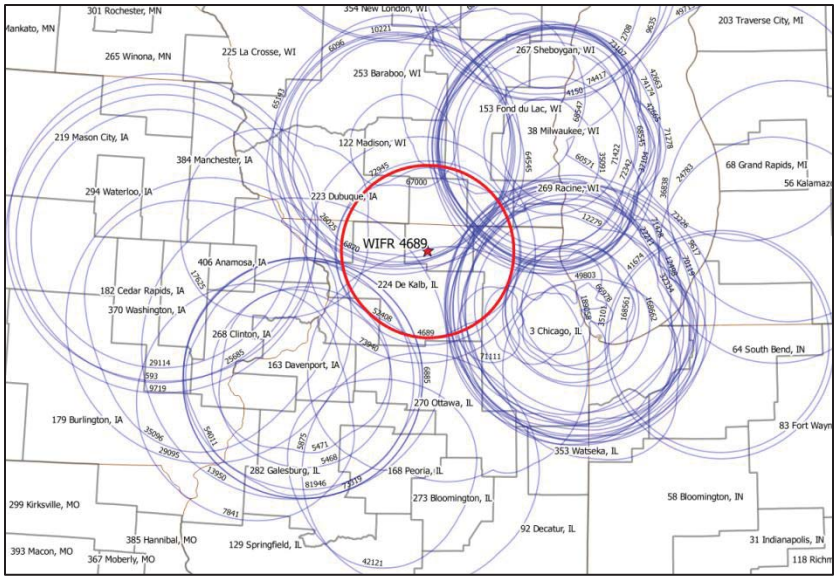
Interference Count: 116

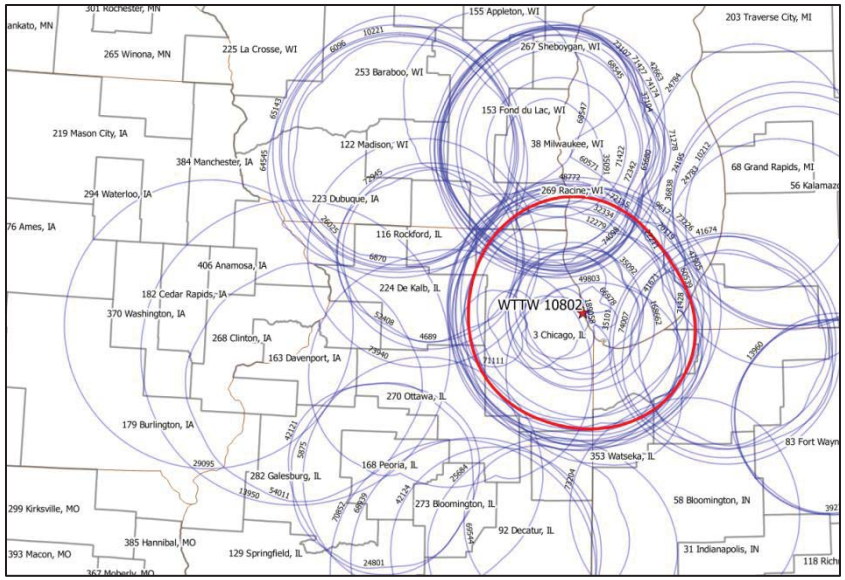
Blocked Pops: 13.3 million

FCC Starting Price: $507 million ($6.35/MHzPOP)

EOBC Proposal: $604 million ($7.57/MHzPOP)

EOBC Compromise Proposal reduces but does not eliminate pricing discrepancy





- *Percentage of times, in simulations released by the FCC, that the station was frozen.*
- *Red Contour is the subject station. Blue contours are for all the stations that the subject station blocks co-channel. Similar maps can be prepared for adjacent channel interference.*