Attachment A

Reply to Reverse Auction Comments

Dale E. Lehman[1]

1. Introduction

The initial comments on the potential use of reverse auctions for universal service should cast serious doubt on their viability for this purpose. Aside from blatantly self-promoting proposals (e.g., NTCH recommends using wireless CMAs as the unit of geography to solicit bids for; the Satellite Industry Association would use no geographical boundaries at all; Century Tel would only apply auctions to CETCs; etc.), several fundamental themes appear which the Joint Board should take seriously.

First, very little evidence is offered that reverse auctions would be consistent with universal service objectives. Brief mention is made of the use of auctions for the following purposes:

- setting timber prices in British Columbia (Verizon),
- establishing stranded electricity investment costs (Verizon),
- government and private business procurement contracting (Tracfone),
- provision of telecommunications services in unserved areas in developing countries (Satellite Industry Association)
- spectrum allocation (Verizon, CTIA, AT&T, and others)

As discussed in section 2 below, rather than providing assurance, these examples cast serious doubt on the ability of reverse auctions to promote universal service in the U.S. They work precisely because the circumstances under which they are utilized differ from the conditions under which universal service must be provided.

[1] Dale E. Lehman is Director of the Executive MBA in Information and Communication Technology at Alaska Pacific University. He has taught at a dozen universities, and held positions of Senior Economist at Southwestern Bell Telephone Company and Member of Technical Staff at Bellcore. He has a B.A. in Economics from SUNY at Stony Brook, and M.A. and Ph.D. degrees in Economics from the University of Rochester. He has published widely in the area of telecommunications economics and policy, including a number of previous papers on behalf of NTCA.

Second, the proponents of reverse auctions cannot agree on basic design principles. Recommended geographic boundaries to be auctioned range from CBGs to CMAs to none at all. Recommended time periods range from less than 3 years to more than 15. Comments are split between those that insist that there be only one winner in each area and those that would require multiple winners, including some (e.g., GCI) that would not limit the number of winners at all, granting ETC status to all low bidders (all opinions that are strongly held). While many comments cite the potential for USF costs to decline with the use of reverse auctions, some of the proposals might lead to significant increases in the overall fund. These contradictory recommendations are discussed in section 3. The only clear implication to be drawn from these conflicts is that they underscore the significant uncertainty associated with the use of reverse auctions.

Third, scant attention is paid to the serious transition problems associated with implementing reverse auctions in areas with existing infrastructure. Given the importance of continued investment in rural areas, the omission of mechanisms to recover past investments before embarking on the use of reverse auctions is worrisome. Preoccupation with decreasing the size of the fund, while jeopardizing recovery of past universal service investments does not bode well for the future of universal service. This is discussed in section 4.

Fourth, some comments confuse the issues by claiming that supporting multiple networks has not been responsible for increasing the size of the fund. This is patently false, as I discuss in section 5. A combination of current USF policies leads to increases in total fund size when funding multiple providers. This combination of factors would also lead to fund increases under many of the proposed reverse auction mechanisms. Reverse auctions, by themselves, will not prevent increases in the total fund size. Solutions raise difficult questions, but do not require adoption of reverse auctions.

Section 6 contains some concluding remarks.

2. The Evidence – Limited and Impertinent

The most striking thing about the "evidence" submitted in the direct comments on reverse auctions is that there is so little of it. Only two parties (the Satellite Industry Association, and I, on behalf of NTCA) mentioned the use of reverse auctions in underdeveloped countries. As I discussed in detail in my direct comments, there has been some success with reverse auctions for universal service in a number of Latin American and African nations. It is important to note, however, that these examples all apply to green-field developments where there was no infrastructure in place. Attempts to use reverse auctions where there was existing infrastructure (e.g., India, Australia) have not been successful. The presence of existing infrastructure raises a number of unsolved theoretical and practical problems for the design of reverse auctions.

Verizon mentions two examples of novel uses of reverse auctions. One involves the setting of stumpage values for government owned timber in British Columbia. Closer examination of these auctions reveals that universal service poses problems that render this example mostly irrelevant. British Columbia auctions off a portion of the government owned timber resource each year in order to set stumpage prices for all of the timber. As a result, they choose a broad cross section of timber properties so as to have a representative sample of all of the timber. In a universal service setting, this would entail running auctions for a broad representative sample of high cost areas in order to establish costs for all of the areas. However, selection of a representative sample of high cost areas poses formidable difficulties. In order to relate the costs of providing service in auctioned areas to those areas that are not put up for auction, there would need to be a methodology that could relate the costs in one area to the costs of providing service in other areas (such as basing the cost differences on population density, terrain, etc.). This would require the same knowledge as a cost proxy model – a task that the Joint Board and the FCC has already found too demanding.

It is also worth noting that the move to auction-based timber valuation in British Columbia was accompanied by a compensation fund for current long-term holders of timber rights that would be displaced under the move to a new system. This recognizes the importance of transition issues, which I take up in section 4 below.

A second example provided by Verizon is the use of auctions to establish stranded cost values for electricity generating resources in Texas. While this does illustrate the flexibility of auction mechanisms to establish prices, it has limited relevance for determining USF costs. Under Texas law, utilities are permitted to fully recover stranded generating costs and these costs are established by the difference between the book value of the assets and the market value of generating assets. It is the latter that uses a market valuation that may be viewed similarly to the use of a reverse auction to establish the cost for providing universal service. The primary difference is that the market is used to establish a number in Texas, not to provide a service as is required with USF. This means that all of the issues associated with quality of service, contract terms, etc. do not have to be faced when using a market mechanism to establish the value of generating assets.

Perhaps the most notable feature of the use of auctions for stranded cost determination in Texas is that full recovery of stranded costs was legislatively mandated prior to the onset of competition in Texas.[2] This recognized the prudence of past investments and is a principle directly relevant to any move from the current USF to a reverse auction mechanism.

It is also worth noting the volatility of market-based stranded cost estimates. In Texas, original estimates (1999) of total stranded costs were $3.3 billion, but market values for generating assets proved to be weaker than expected, resulting in significant rises in stranded costs. For example, one utility, CenterPoint Energy Houston Electric, claimed $3.7 billion in stranded costs alone, by 2004. Recent energy price increases may well

[2] "Lighting the Lone Star: The Texas Experience with a Competitive Electricity Market," by Phillip G. Oldham and Joseph P. Younger, *Wake Forest Law Review*, Vol. 40, 2005.

result in substantial reductions in (or even elimination of) stranded costs, but this only underscores the volatility of market-based valuations. Volatility of market-based USF support will impact future rural investment. It also is incompatible with any capping of USF levels, since market price swings can easily make such caps unrealistic.

Tracfone refers to the pervasive use of reverse auctions for government contracting. It is worth noting that the evidence concerning the success of reverse auctions for procurement purposes is mixed, at best (see the comments of M.L. Emiliani for more information). Others have expressed reservations about the ability of reverse auctions to lower procurement costs and maintain quality purchases. For example, the Associated General Contractors of America states that "reverse auctions will seldom, if ever, provide the same level of benefits and protections existing in currently recognized selection procedures for construction contractors."[3] The Army Corps of Engineers reported to Congress that "reverse auctions should not be used to procure construction services."[4]

The relative advantages and disadvantages of reverse auctions for procurement purposes is not the issue here. The considerations involved are relevant for their use for USF purposes, however. Among the factors to be considered are

- Whether there is likely to be sufficient competition in bidding.
- The specificity of the product or service specification.
- How strategic the purchase is (i.e., how serious are the consequences if there is a problem with the purchase).
- The likelihood of significant cost reductions.
- The complexity of the market (e.g., how quantifiable are the factors?).

I used an on-line tool[5] to evaluate the factors relevant to using reverse auctions for USF. Based on my selection of inputs, the tool provided consolidated guidance "Do Not Use an eRA [Electronic Reverse Auction]." The main contributing factor to this conclusion was

[3] *Construction News*, The Associated General Contractors of America, September 16, 2003.
[4] *News & Views*, Associated General Contractors of America, August 12, 2004, referring to a US Army Corps of Engineers White Paper.
[5] Electronic Reverse Auction (eRA) Pre-Auction Decision Analysis Tool, version 4.02, copyright, Lee S. Crane, 2006.

the complex nature of the service to be auctioned. I discuss some of the difficulties in my direct comments, including the need to specify in advance the exact requirements of universal services over the contract period, and problems associated with ongoing monitoring and enforcement of quality standards. NASUCA raises many of these issues in their comments.

Numerous parties refer to the FCC's success with spectrum auctions as evidence of their likely successful application to USF. Notwithstanding some continuing issues regarding spectrum auctions, their relative success in allocating spectrum resources is of little relevance for USF. Spectrum is a fairly homogenous resource. There is little concern about the subsequent use of the spectrum – the purpose of the auction is to allocate spectrum to its most valued use, as determined by the bidders. For USF, there is a dual concern to minimize the cost of providing universal service and the need to ensure that the ambitious goals that Congress established for universal service are achieved. Spectrum auctions are technologically sophisticated and have (arguably) done a better job at determining the best use of spectrum than alternative policies. Auctions, however, have not resulted in universal service. Many auction spectrums have resulted in deployment of services in urban and suburban markets with relatively less build-out in rural areas. That reflects the highest valued use of the spectrum. Universal service requires different considerations – ubiquity, quality, and comparability. There is no evidence that spectrum auctions have been able to provide these features. In fact, it is largely the ability of bidders to avoid such constraints that determines the highest valued use of the spectrum.

In sum, the evidence provided on auction mechanisms underscores the flexibility and potential value of auction mechanisms for establishing market valuations for a variety of resources. These applications highlight the importance of transition mechanisms when moving from more direct regulation to the use of auctions. They also do not generally involve the contractual obligation to provide a complex service as a result of the auction. In this respect, the evidence underscores the uncertainty surrounding the use of reverse auctions for universal service. Few of the examples cited involve telecommunications

services, with none relying on an auction mechanism to guarantee provision of a complex service over a long period of time.

3. Contradictory Auction Designs

It is not surprising that the proponents and opponents of reverse auctions widely differ in their assessments. It is more disturbing that the proponents have such divergent beliefs about the proper structure for such auctions, all held with strong convictions. They do not converge on any significant dimension for such auctions – not the number of winners, the size of areas to be auctioned, the time periods for "licenses" to be held, and not on the impacts on the overall size of the high cost fund.

The number of winners is a critical aspect of auction design. Proponents of single winners invariably point to its necessity for reducing the size of the fund (e.g., AT&T, Tracfone, Qwest, NJ Board of Public Utilities). Proponents of multiple winners stress its compatibility with the development of competition in rural areas (e.g., GCI, Dobson, CTIA, Alltel, Corr, Rural Cellular Association). Verizon calls for 2 winners initially (one ILEC and the other wireless), with a transition to a single winner. NTCH calls for 2 winners, but from a single pool of bidders. CTIA permits multiple winners, but promotes a "winner take more" system, wherein the lowest bidder receives more support than higher bidders. The exact details of how such a system could work are not specified, nor are they obvious.

Resolving this issue is necessary if reverse auctions are to be adopted. This would require that the Joint Board state whether reducing the fund size or increasing competition is a complementary goal of universal service. It is not clear that either of these objectives is even consistent with Congress' stated goal of universal service in Section 254 of the Act: comparable rates for comparable services, including advanced services. As a secondary goal, there is little Congressional guidance whether fund size or degree of competition

should prevail. Nor is it clear that there is a compromise solution between the extreme positions held. The politics are clear, however - current fund recipients advocate multiple winners while those receiving less (and paying more into the fund) from the current fund call for single winners.

The size of areas to be auctioned is another fundamental design issue. A number of stakeholders advocate small geographic areas (e.g., Dobson, NCTA, AT&T, Rural Cellular Association, US Cellular). NTCH advocates the use of wireless geographical units (CMAs), while TDS prefers ILEC study areas. Alltel advocates geographical units that conform to nobody's service area (e.g., counties). The need for identical areas for all bidders is explicit in some proposals (e.g., Rural Cellular Association) and implicit in others. A number of parties call for ending the distinction between rural and nonrural areas (e.g., AT&T, Qwest, GCI) but show little indication of the potential increased fund size that might result (see section 5 below for more on this).

Small areas are more appropriate for determining adequate support levels, since there is little averaging of costs to mask the true costs of serving particular areas. Small areas will also generally result in a larger fund size and require more complex combinatorial auctions. Given that there are multiple existing network providers serving rural areas, it is clear that choice of geographical size may prejudice the auctions for one group of providers and against others. The only way to avoid this outcome is to choose a geography that conforms to no stakeholder (although the Satellite Industry Association calls for no restriction on geography at all, a position clearly consistent with their own particular technology). But geographies that do not match any current service areas will, at a minimum, impose significant administrative contracting and administrative costs for bidders to arrange to offer services to newly defined service areas, and may expose rural areas to risks to service availability.

Time periods recommended range from short (e.g., GCI) to longer than 10 years (e.g., AT&T, Rural Cellular Association). Century Tel does not like fixed time terms at all, pointing out that they provide disincentives for investment as the time limit advances. Virtually all comments acknowledge the tradeoff between investment incentives (which favor long time periods) and potential benefits that result from technological change (which favor shorter time periods). It is not clear that either position dominates on theoretical grounds. However, it is clear that shorter time periods exacerbate issues associated with transition and investment, which I address in section 4.

These widely varying positions on fundamental issues of auction design underscore two features which I explored in my direct comments on this Notice. First, the issues are complicated by the existence of multiple existing infrastructure providers. Reverse auctions are much easier to implement in a green-field environment than in the setting that exists in the US. Second, reverse auctions involve considerable uncertainty in their impacts (see NASUCA for a detailed exploration of this). This will have financial consequences for providers as well as raising doubts about continued availability and development of universal services.

4. Transition Issues and the Failure to Promote Investment

Many proposals contain transition periods during which carriers would move from today's USF to a reverse auction mechanism. The transition is meant to avoid rapid changes in financial support for ILECs. Few comments explicitly deal with the need for carriers to recover investments already incurred (USTA is a notable exception). How existing investments are treated, however, will have consequences for future investment in rural infrastructure.

Existing investments in rural area were made under existing high cost programs. To the extent that they have been prudent investments, they should be recovered fully prior to any implementation of a reverse auction under which carriers may lose their existing

support. Stranded cost recovery has been a part of electricity deregulation and was built into British Columbia's adoption of market-based stumpage prices. Failure to provide for recovery of past investments violates notions of fairness, as well as impacting efficiency through its effects on future investment incentives.

USTA stresses the need for continued investment in rural areas and that stranded investment may be a significant issue. Qwest expresses concern about the application of auctions "in areas where significant up-front investments have already been incurred to provide service to area customers." Concern about future investment is a recurring theme in many of the comments (e.g., Frontier, Century Tel, Embarq, NECA, GVNW, CoBank, Rural Telephone Finance Cooperative, NASUCA, etc.). Notable is the absence of such concerns among the strongest proponents of reverse auctions. This divergence of positions is not surprising, but it is disturbing. It points to a political problem with any attempt to implement reverse auctions, and it makes clear the increased uncertainty that surrounds reverse auctions for USF. This uncertainty will raise the cost of capital for rural investments and skew investments toward those most likely to be recovered without any USF support. While this may be an efficient market outcome, it does not represent the goals of universal service policy.

New technologies have lowered some costs of providing services in rural areas, but also require new investments to be made. These still have economies of scale and are often sunk, long-term commitments of capital. Reverse auctions, with the attendant risks and volatility, do not fit well with incentives to undertake such investments. What does it indicate that the proponents place so little emphasis on this point?

5. Total Fund Size and Support of Multiple Networks

Some parties attempt to deny the fact that increases in the fund have resulted from designation of multiple ETCs. For example, Corr Wireless (at page 8) states that "[T]he fact is, however, that the current system already precludes multiple recipients."

Allegedly, this is because the size of the market is fixed and ETCs only receive funding for the lines they actually serve. This position is elaborated in the comments of the Rural Cellular Association (at page 8):

> "Today it is impossible to subsidize the cost of constructing multiple network in their entirety because the amount of support in any given area is effectively capped by the number of customers within that area. That is, CETCs only receive support when they win a customer and lose support when they lose a customer. So if there are 100 customers in a remote area, CETCs that serve the area would compete for those 100 customers, and no more than 100 connections will be supported. Because competitors have to fight over a fixed number of customers, it matters not how many CETCs are designated."

At best, this analysis is misleading. It is certainly incorrect, and failure to understand how the current mechanism works risks repeating its problems in a reverse auction environment. In fact, the economics of supporting multiple networks has little to do with reverse auctions at all.

Consider the following example (it is easily generalized): Suppose a high cost region has two customers, one with a cost of $50/month and the other with a cost of $20/month, and that a rural ILEC currently serves both customers. Assume that USF supports all rural service areas with average costs above $25/month, and that such support is 100% of the excess of costs above this benchmark.[6] These assumptions mean that the ILEC currently would receive $20/month of USF support (average cost = $35; support equals 2 x ($35-$25) = $20).

Now, suppose a CETC is designated within the same area and that it wins the lower cost customer away from the ILEC. The rural ILEC support level would now be $25/month (1 customer x ($50-$25), as would the CETC support (under the equal support rule,

[6] A fact that many commentators seem to forget is that current USF mechanisms provide scaled support levels that are less than 100% of any costs above the benchmark (115% of the nationwide average, for rural study areas). So, it is an exaggeration to suggest that incentives for cost efficiency are nonexistent due to complete subsidies covering rural ILEC cost levels. The subsidies are no complete, and there are additional checks on inefficiencies provided by numerous levels of oversight (owners, customers, regulators, financial markets, etc.) and competitive pressure (particularly on revenue-generating minutes of use by wireless carriers).

discussed below).[7] Total support would now be $50/month. Even if the CETC support level does not immediately adjust to the new ILEC per line support level (using the original $10/line/month ILEC support level), total USF would now be $35month rather than the original $20/month.

The situation is actually worse than this simple example suggests. The current rules permit the CETC to receive support even without winning the lower cost customer away from the ILEC. That is, the customer may subscribe to the CETC service and the ILEC service (as is common with many wireless subscribers). Then, the ILEC would continue to receive $20/month of support and the CETC would receive $10/month of support. This support can be extended to multiple CETCs and for additional subscribers. A fixed number of subscribers does not mean a fixed number of supported lines under the current USF mechanism.

Before I discuss the specific combination of policies that results in these outcomes, consider one proposed "solution" to this problem. Suppose the rural ILEC were required to de-average its high cost support (e.g., this has been proposed by GCI). The original support level would be $25/month for the ILEC for serving the one high cost customer. There are two important things to note about this de-averaged support level. First, it will generally involve more total support than with the single averaged cost calculation ($25 versus $20). This results from the averaging effect of combining relatively low cost subscribers with relatively high cost subscribers in the averaged high cost mechanism.[8]

[7] An implicit, but important assumption is being made here. It is that the average cost of serving the high cost customer remains at $50/month after the low cost subscriber switches carriers. If the original average cost levels ($20 and $50) result from the presence of some fixed cost (e.g., suppose the incremental cost of serving each customer is $5 and there is a total of $60 of fixed cost), then the ILEC's total cost will be $65/month rather than the $50/month given above. In general, the presence of fixed network costs (not dependent on the number of subscribers) will cause the ILEC's per line costs to rise to an even higher level than indicated in the example above.

[8] The extreme form of this effect is that many rural study areas do not qualify for any support when their costs are averaged with many low cost subscribers within a single study area. An indication of the size of this averaging effect is provided by data from California. In 2005, the entire state received $37.257 million in high cost support. The state High Cost Fund B (which applies to nonrural carriers) totaled $436 million. This means that calculating support on the basis of small geographic areas (like CBGs, which are used in

The $25 is the true level of sufficient support for the $50 cost/month subscriber; the averaging effect results in only $20 of support being received. Under current FCC rules, carriers that de-average their support cannot receive more total support than they received under the averaged mechanism, so this would mean only $20 of support for the high cost customer under current policies.

Second, designation of a CETC will not result in an increase of total support, if the CETC now serves the lower cost subscriber. If they serve the high cost subscriber, however, they will also receive the $20 of support that the ILEC receives (unless they win that customer away from the ILEC). So, de-averaging high cost support can result in level USF support, under particular circumstances, but will still lead to increased total support, under other circumstances.

The effect of multiple ETCs on total fund size must be viewed as the result of several features of the current high cost policy mechanism:

- Duplicative support (multiple ETCs)
- Equal per line subsidy (the "equal support" rule) for all ETCs
- Use of study area average costs to determine support levels
- Uncapped per line support levels, upon CETC entry.

This combination of policies results in increases in the size of the fund, as the number of supported networks increases. It would also apply to total fund size under a reverse auction that permits multiple winners within a designated area. Fund increases can be prevented by changes in one or more of these policy features, but each "solution" entails serious problems. Consider the alternatives:

- Permit only single auction winners (e.g., AT&T, Seniors Coalition, etc.). This would eliminate support duplication, but at the cost of decreased competitive pressures (e.g., see GCI's comments). It also exacerbates many of the contracting problems associated with reverse auctions, since a single winner would require a

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California), could increase total support by a factor of 10. This averaging effect could apply to any reverse auction proposal that uses similar small units of geography.

fairly long contract period, accompanied by issues of monitoring service quality, further investment, etc.

- Permit multiple auction winners but with capped per line support levels (GCI). This would prevent increases in the total fund size, but at the cost of rendering the fund insufficient. In the above example, the rural ILEC could be left with serving only the $50/month subscriber with a support level of only $10/month.[9]
- De-averaging support levels. This can mitigate some of the insufficiency problems associated with capping per line support, but would require that initial per line support be correctly calculated based on the true costs of serving high cost subscribers. Given the significant cost complementarities that would accompany serving small groups of customers (or even individual subscribers), this would require a complex combinatorial auction, the feasibility of which is not clear. Contingent bids for serving particular groups of high cost subscribers with or without serving other groups of customers would need to be permitted, as well as combinatorial bids across numerous rural study areas. De-averaging support with per line caps and multiple auctions winners would also do nothing to stem the increased total support that would result from supporting both wireline and wireless connections.
- Primary line support restrictions can prevent duplication of support. The Commission has already rejected this approach, given the administrative complexity of trying to enforce such a restriction. Even if a primary line restriction could be enforced, such a policy would entail the same issues of fund insufficiency as presented by geographical de-averaging of support. Given large cost complementarities between serving individual subscribers, a primary line restriction on support would require per-line support to be recalculated on the basis of the actual number of high cost subscribers that a carrier ends up serving. Caps on per-line support, along with a primary line restriction, is a blueprint for insufficient support levels (for example it would yield only $10 of support for serving the $50/month subscriber in the above example).
- Eliminate the equal support rule (NTCA, OPASTCO, and many of the small ILECs). Basing CETC support on CETC costs can avoid some of the most egregious examples of unnecessary total USF increases. For example, if the CETC costs are the same as ILEC costs, then a CETC that serves only the low cost subscriber ($20) in the above example, would not require any support. This would achieve some of the same benefits as geographical de-averaging of support can provide. However, by itself, eliminating equal support will not reduce the size of the fund, nor will it solve the problems with the current USF. Without more information on CETC costs, basing support on actual CETC costs could lead to

[9] GCI recognizes this problem and cites the need for carriers to share the COLR costs. They cite the Alaska policy of sharing such costs – all carriers are subject to the same line extension policies. While this does "share" the forward-looking cost of COLR obligations to serving new greenfield developments, it does nothing to share the already incurrent costs of extending a ubiquitous network to fulfill COLR responsibilities to the current service area. Absent a workable policy for sharing these costs, GCI's proposal risks inadequately supporting the current COLR. Geographical de-averaging of support can help address this insufficiency, but only if total support is not capped when de-averaging.

> further increases in total support. To be effective, this change must be accompanied by meaningful reform of the ETC designation process.

Consider the two extreme forms of this last option. ETC support can be based on actual ETC costs, but only after designation that ETC status is in the public interest. This would mean that regulators would need to find that designating a second (or third, etc.) ETC in an area is actually desirable, and then would support that ETC on the basis of what it actually costs to provide the desired services.

The other extreme is proposed by GCI. No ETC designation process is required – all bidders would be supported, depending on the number of customers they attract. Per-line support levels would be determined by a competitive auction. GCI cites this approach as most consistent with providing the benefits of competition in rural areas.

There is a stark contrast between these two positions. GCI acknowledges that symmetric support of competitors only makes sense if the regulatory burdens on competitors are also symmetric. This symmetry is elusive in practice. Absent symmetry of obligations, symmetry of support simply becomes an invitation for cream-skimming of support. Symmetric imposition of obligations presents considerable practical issues, particularly for services that utilize different technologies (e.g., wireline and wireless). The GCI position also assumes that competition in rural areas is a necessary goal for universal service. If competition is the goal, then its benefits will be maximized with symmetric support. If the goal is universal service, however, then competition is neither necessary nor sufficient for its achievement. In that case, meaningful designation of ETCs, along with support based on the actual costs of providing designated services, should be the goal of USF reform.

6. Concluding Comments

The Joint Board needs to address multiple and conflicting goals: continued availability of services of comparable quality at comparable rates in rural areas, minimizing the size of

the fund, and developing competition in rural areas. The problems of USF – rapid fund growth, dwindling funding base, issues with competitive neutrality – cannot be solved by moving to a reverse auction mechanism. The total size of the fund will only decrease under reverse auctions by jeopardizing the sufficiency of the fund. Reverse auctions only impact the disbursement of funds, thereby doing nothing about the dwindling base. Competitive neutrality requires symmetric opportunities for receiving support and symmetric regulatory burdens.[10] Establishing such symmetry has proven elusive, particularly with differing technologies. Evidence from other countries that have used reverse auctions for universal service purposes suggests that the problems posed by existing multiple infrastructures cannot easily be navigated.

Devoting further attention to reverse auctions will only serve as a distraction from the fundamental problems facing USF. The increased uncertainty is counterproductive to the goals of universal service. The intensely conflicted positions of the stakeholders increase the likelihood of political compromises which will dissipate any potential benefits of adopting reverse auctions. As suggested by Verizon, reverse auctions are a waste if they are designed to protect the status quo. On the other hand, any implementation that significantly upsets the status quo will be a risky and uncertain policy change. And, the design of any reverse auction mechanism will depend crucially on the resolution of these fundamental issues – resolution that must take place before reverse auctions can be further considered.

[10] Contrast the comments of GCI and Embarq to see just how different the concepts of symmetric burdens can be. GCI believes symmetry is satisfied by adoption of a uniform line extension policy; Embarq believes ILECs alone have borne the costs of ubiquity.