

**Calcell Wireless, Inc.**

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November 9, 1993

Mr. William F. Canton  
Acting Secretary  
Office of the Secretary  
Federal Communications Commission  
Washington, D. C. 20554

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93-253

Dear Mr. Canton:

Enclosed please find one original and nine copies of comments by Calcell Wireless, Inc., due November 10, 1993 in response to FCC 93-455; PP Docket No. 92-253; and GEN Docket 90-314 - In the Matter of Implementation of Section 309(j) of the Communications Act Competitive Bidding.

Sincerely,

*Albert H. Frazier Jr.*

Albert H. Frazier, Jr.  
President & CEO

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BEFORE THE  
Federal Communications Commission  
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In the Matter of  
Implementation of Section 309(j) of the  
Communications Act Competitive Bidding

Docket No. 93-455  
PP Docket No. 93-253

To: The Commission November 10, 1993

COMMENTS OF CALCELL WIRELESS, INC.

SUMMARY

Calcell Wireless, Inc. (Calcell) hereby respectfully submits comments on the Commission's Notice of Proposed Rule Making (NPRM) regarding Implementation of Section 309(j) of the Omnibus Budget Reconciliation Act of 1993 (Budget Act), adopted September 23, 1993<sup>1</sup>, which is now part of the Communications Act of 1934.

Calcell supports the Commission's overall plans to implement provisions of the Budget Act allowing competitive bidding to award PCS licenses. Calcell further supports the Commission's decision to designate two of the seven spectrum bands<sup>2</sup> for exclusive bidding among small businesses, minority and women owned businesses, and rural telephone companies. However, Calcell

<sup>1</sup> See Notice of Proposed Rule Making FCC 93-455 (September 23, 1993)

<sup>2</sup> The Commission has set-aside a 20 MHz and a 10 MHz band for exclusive bidding among designated entities.

believes that more must be done to "level the playing field" and truly give these historically disadvantaged groups the opportunity to participate in PCS and other emerging technology markets.

From the perspective of a minority owned business, Calcell believes that the Commission must take the additional steps of designating band C, the 20 MHz band, as the Infrastructure Preference band, and implement other recommendations made by the FCC's Small Business Advisory Committee (SBAC),<sup>3</sup> to fully meet the Congressional objectives described in Section (j)(2)(B)<sup>4</sup> and Subsection (j)(4) of the Budget Act<sup>5,6</sup>. Infrastructure Preferences represent a type of "Innovator's preference" that not only provides ownership participation opportunities for designated groups, but also provides incentives for them to employ, train disadvantaged individuals and source capital equipment from women and minority owned firms.

Companies awarded Infrastructure Preferences would make specific and measurable commitments to rebuild America's inner cities by locating in designated enterprise zones and employing and training socially and economically disadvantaged workers. This commitment would last over the ten year life of the license and be renewable annually to ensure steady, long-term

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<sup>3</sup> See the SBAC Report which has recommendations on the use of tax certificates, an innovator's bidding preference, installment and royalty payments, distress sale provisions, financial qualification provisions, and establishment of a capital fund as part of a package of preferences for small businesses and women and minority owned businesses.

<sup>4</sup> Section 309(j)(2)(B) objective (B) "promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women;"

<sup>5</sup> Subsection (j)(4)(C)(ii)"economic opportunity for a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women"

<sup>6</sup>Subsection (j)(4)(D)"ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services, and, for such purposes, consider the use of tax certificates, bidding preferences, and other procedures;"

improvement in the plight of the disadvantaged. As an incentive for achieving the specific infrastructure preference objectives, eligible firms would receive a significant credit (up to 100%) on their royalty or installment payments. A more detailed description of the criteria for and benefits of Calcell's infrastructure preference proposal is provided below in the Sections covering the SBAC's Innovator's Bidding Preference and the Treatment of Designated Entities.

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## AUCTION DESIGN

Calcell believes the Commission has done an excellent job in designing the overall auction structure. The speed required to develop and propose the recommended structure is particularly noteworthy given the wide variety of options available to the Commission for this new way of allocating spectrum. Calcell shares the Commission's belief that PCS licenses should be awarded to those who value them most<sup>7</sup>. Achieving this objective in a world that affords equal opportunity to all companies would be easy, but unfortunately, this world does not yet exist. In today's world the value of a license typically reflects previous business positioning as much or more than what an innovative company might accomplish in using the license to provide its view of PCS.

Some companies will value the license more than other companies simply because of cost advantages that result from their existing businesses. Cable, cellular, local exchange and long distance phone companies have built-in structural cost advantages due to their ability to use existing infrastructure facilities<sup>8</sup>. Other firms face a sizable competitive disadvantage in bidding against them for licenses. These facilities will allow these companies to construct PCS networks at a lower cost than firms who have no such facilities. As a result, they will be able to bid more for the licenses and perpetuate their advantage. While they can pay more for the licenses, these companies are unlikely innovators as they may be more concerned about protecting their existing customer bases, than rapidly deploying services to attract new customers. For this and other reasons<sup>9</sup>

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<sup>7</sup>See Notice of Proposed Rule Making FCC 93-455 paragraph 34 "As a general matter and consistent with Sections 309(j)(3)(A) and (D), we seek a bidding system that awards licenses to the eligible parties that value them the most within the guidelines set by Congress."

<sup>8</sup> In market areas where these firms have infrastructures in place they will be able to use right-of-way exemptions, existing network buildings and facilities, technical personnel, etc. to add PCS services to existing services at costs lower than companies such as small and minority owned businesses without these advantages.

<sup>9</sup> Aside from possible facility advantages, large well capitalized firms have other advantages in bidding on PCS spectrum such as the ability to spread the risk of entering a new business over

preferences are necessary to ensure that small businesses, and women and minority owned businesses have an opportunity to participate.

### **Bidding Rules**

The Commission asked for comment on whether bidders should be permitted to submit more than one bid per license in the context of a sealed bid auction. Calcell believes that only one bid should be permitted and deposits should be required with that bid. Firms or entities participating in the sealed bid segment of the auctions will have opportunities to withdraw their bids and change their bids as participants in the oral bidding segment of the auctions for individual licenses. Allowing multiple sealed bids would bias the licensing process in favor of companies bidding on groups of licenses (the sealed bidders). For example, they may be able to manipulate the outcome of the auctions by making multiple bids. After the initial results of the first auctions they could decide to withdraw all bids except the one they believe will be just high enough to beat out the sum of the individual bidders. In addition, multiple bids create unnecessary administrative work for the Commission with little or no offsetting benefit.

The Commission also asked for comment on whether sealed second-bid auctions should be used, despite their complexity, because they have the advantage of revealing the maximum amount bidders are willing to pay. Calcell agrees with the Commission that sealed second-bids should not be used under any circumstance. A bidding system that reveals the maximum amount certain parties are willing to pay without obligating them to actually pay it will not

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their existing lines of business allowing them to raise capital more easily and at lower cost. Furthermore, many have well known consumer-oriented brand names that can be easily transferred to PCS service, giving them a huge marketing advantage. Other advantages arise because of access to in-house technical resources and other skilled professionals. At this point we have not even begun to consider capital formation barriers that are unique to women and minority owned businesses.

result in incremental revenue, furthermore the increase in complexity outweighs any potential benefit.

In situations where multiple homogeneous licenses are offered, the winner should pay the price they bid and not the price of the highest losing bid. Paying the price bid will likely result in the highest revenue proceeds from the auction<sup>10</sup> and it has the additional benefit of allowing the bidder to know exactly what they have to pay should their bid be judged a winner. Furthermore, spectrum bands are rarely identical as subtle propagation and/or interference differences exist between any two bands<sup>11</sup>. In auctioning multiple bands, the highest bidder should have first choice among "so called" homogeneous or identical bands as the party willing to pay the most. The second highest bidder should have the second choice, and so on, until all winning bids have been assigned spectrum. A system where the highest bidder pays what they actually bid ties logically to the notion that the first choice of spectrum goes to the highest bidder.

The Commission's proposed bidding method (oral) with sealed bids used for bids on groups of licenses appears to be the best compromise between simplicity and obtaining the highest amount of revenue from the auction. Most individuals have participated in oral auctions in the past and this familiarity provides them with a high level of comfort. A high comfort levels should induce more companies to participate in the auctions, one of the objectives set by

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<sup>10</sup> The highest bidder would receive a windfall of the difference between their bid and that of the highest losing bid. Although the net impact of this factor may be reduced as bidders may employ a different bidding strategy that could result in slightly higher overall bids. However, as long as every one what they are willing to pay then the highest revenue will result from everyone paying what they bid.

<sup>11</sup> At first glance the two 30 MHz PCS bands A and B would appear identical for a given MTA. In reality the number and location of the incumbent fixed microwave licensees will make on band potentially more valuable than the other. Furthermore band A will have slightly better propagation characteristics because of its location in the electromagnetic spectrum. Similar arguments apply to the 10 MHz bands D through G.

Congress<sup>12</sup>. The use of sealed bids opened only after the oral auctions have been completed also seems reasonable as it accommodates both those interested in individual licenses and those seeking multiple licenses without a bias to either class of participant.

### **Innovator's Bidding Preference**

The Commission asked for comment on the SBAC's proposed innovator's bidding preference which provides a credit equal to 10% of an applicant's bid. In particular, the Commission wanted to know if it is feasible to expeditiously determine eligibility for credits prior to an auction. Calcell is intrigued by the concept and supports its implementation. In particular, Calcell wholeheartedly supports the notion of rewarding proposals that provide for equitable distribution of service to the public<sup>13</sup>.

However, Calcell is sensitive to the administrative burden such a program may place on the Commission. For an innovator's preference program to be workable, given the short time frame available before auctions must commence, the Commission can realistically only structure programs where the evaluation process is straightforward and the selection criteria specific and objective. An example of the type of program that cannot be realistically implemented in the available time frame is the pioneer's preference program. The pioneer's preference program has proved very worthwhile in rewarding innovators of new emerging technology services, but it takes many months if not years to evaluate an applicant's proposal. As a result, it has consumed a tremendous amount of the Commission's time and resources<sup>14</sup>.

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<sup>12</sup> See Budget Act Section (j) (2)(B) where disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women was cited as a key objective.

<sup>13</sup> See FCC Small Business Advisory Committee to the Federal Communications Commission Regarding GEN Docket 90-314 (September 15, 1993) (SBAC Report) at 14-15

<sup>14</sup> See ET Docket 93-266 Report No. DC-2520 issued October 21, 1993. Review of Pioneer's Preference Rules Initiated.

## **Infrastructure Preferences**

One way an innovator's preference proposal can be expeditiously evaluated to determine eligibility for credits is when it is evaluated against an unambiguous set of criteria. For example, the criteria Calcell developed for determining infrastructure preference eligibility can easily be evaluated prior to an auction. Calcell's recommended criteria for award of an infrastructure preference is provided in the next section. Either a company agrees to commit to the provisions highlighted below, or not. Since the benefits for complying with the infrastructure preference requirements accrue over time, non-compliance will result in the forfeiture of those benefits<sup>15</sup>.

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<sup>15</sup> Calcell initially proposed the concept of infrastructure preferences in its comments of November 9, 1992 to the Commission's NPRMTD in GEN Docket 90-314. The concept presented here has been modified to take into account award of licenses through competitive bidding.

## Criteria For Infrastructure Preference Eligibility

<p>Overall Objectives</p>	<ul style="list-style-type: none"> <li>• A commitment by the preference holder to:             <ul style="list-style-type: none"> <li>- Revitalize designated enterprise zones and other impoverished inner city or rural areas<sup>16</sup></li> <li>- To provide a wireless communications infrastructure in these areas at an expedited pace.</li> </ul> </li> </ul>
<p>Performance Objective</p>	<ul style="list-style-type: none"> <li>• PCS service will be provided in designated enterprise zone areas one full year ahead of the FCC mandated build-out requirements for the overall territory covered by the license.</li> </ul>
<p>Economic Opportunity Objectives</p>	<ul style="list-style-type: none"> <li>• The headquarters for the PCS license holder will be located within the boundaries of a designated enterprise zone.</li> <li>• 50% of the branch offices of the license holder will be located in designated enterprise zones, or 50% of the total workforce will be employed in company locations within designated enterprise zones.</li> <li>• Infrastructure preference holders will agree to employ a work force that reflects the demographics of its licensed market and includes racial minorities as a percentage of the total workforce equal to or greater than their percentage of the overall population in the licensed market.</li> <li>• The license holder will dedicate at least 1% of its annual operating budget to specific education and job training programs for socially and economically disadvantaged employees.</li> <li>• The license holder will award 10 percent of its capital expenditures and supply contracts to firms owned by women and racial minorities, with a minimum of 5 percent of the total purchases from minority-owned firms.</li> </ul>

<sup>16</sup> In some rural trading areas there may not be any designated enterprise zones. In such cases Calcell suggests defining other impoverished areas as the locations to meet requirements specified for designated enterprise zones. Criteria should center on helping areas with unusually high unemployment rates and with per capita incomes of 70% or less of the trading area as a whole. Local economic development agencies could define such zones prior to the auctions.

Infrastructure preference designated PCS licenses would be awarded to the highest bidder just like other licenses. However, as the 20 MHz band would be the primary (possibly only) band designated for such preferences, only designated entities eligible to bid on spectrum in band C would compete<sup>17</sup>. As a result, race or gender would not be a basis for receiving an infrastructure preference as all small businesses would potentially be eligible. A more detailed discussion of this aspect of eligibility is discussed in the section on the Treatment of Designated Entities.

### **Benefits Awarded to Infrastructure Preference Holders**

In exchange for committing to the infrastructure preference requirements listed above, eligible firms would receive the following benefits:

- The payment terms of the winning bid would be substantially different for the infrastructure preference holder. Such a license holder would be able to pay their "winning bid" for the license made at the competitive bidding auction in equal installment or royalty payments over the 10 year life of the license.
- The deposit rules for bidding in the designated entity band would apply to companies requesting an infrastructure preference. For example, a non-refundable 10% deposit might be required up front for a winning bid if the same deposit were required for other designated entities participating in the auction.
- In lieu of completing the annual installment or royalty payments, infrastructure preference holders in compliance with the infrastructure preference requirements outlined above would have those payments

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<sup>17</sup>The Commission could decide to expand the Infrastructure Preference award to the other band for designated entities, band D, the 10 MHz band.

substantially reduced (up to 100%)<sup>18</sup>. The preference holder would be expected to provide evidence that they are in compliance with the infrastructure preference requirements annually, approximately 30 days preceding the timing of each additional installment or royalty payment. Compliance monitoring would be conducted by the local economic development agency.

- If a company fails to meet one or more of the infrastructure preference requirements after having been granted an infrastructure preference, then full payment of the installment or royalty payment due for that year would be required. However, the company may apply for a special hardship exemption if failure to comply is caused by extenuating circumstances. In this case the monitoring agency would decide whether to require full payment or seek only partial payment if it deems the application for hardship worthy.
- The rules for reducing or waiving the installment or royalty payments will remain in effect even if a company changes management or ownership as long as the new owners continue to meet the infrastructure preference requirements.
- If a firm or group submits winning bids on multiple licenses and receives infrastructure preferences for multiple licenses, then the infrastructure preference requirements apply to all of the licenses held by the company or entity on a combined basis, rather than for each individual license. At

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<sup>18</sup>Infrastructure Preference holders will incur substantial costs to comply with requirements. Some of the additional costs of doing business include: the 1% mandatory budget for employee training, costs for increased security and higher theft losses in high crime locations, lower initial employee productivity as more under skilled workers are employed, and the administrative costs to certify compliance. Calcell believes that the credit for installment payments or royalties should roughly offset the increased cost of doing business up to the point of providing a 100% credit on those payments.

its option, a preference holder could ask to be evaluated on a license by license basis.

Calcell's infrastructure preference concept represents just one of several innovative proposals<sup>19</sup> that could help the Commission fulfill its mandate of disseminating PCS licenses among a wide variety of applicants and providing economic opportunity for businesses owned by minority groups and women. Other proposals should be considered too, as long as the criteria can be structured to quickly determine whether a company or entity meets the criteria. Assessments must be able to be completed within a time frame that allows the deadlines imposed by Congress for PCS licensing to commence.

### **Bidding Sequence**

The Commission asked for comments on the sequence of bidding for PCS licenses. Calcell believes that for the large spectrum blocks (20 and 30 MHz), geographic consolidation will be more important than consolidating spectrum across bands. As a result, Calcell recommends that for the 30 MHz bands the Commission auction the major trading area's (MTA's) in descending order of population, beginning with the most populous. Because there are only 51 MTA's to auction, the process should go relatively quickly, making the need to auction MTA's across regions unnecessary. Parties interested in assembling mega-regional market areas made up of multiple MTA's will have a reasonable opportunity to do so as will those interested only in individual MTA's, with both groups participating at the same auction. The 30 MHz spectrum auctions should precede the 20 MHz and 10 MHz auctions.

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<sup>19</sup> The SBAC Report, FCC Small Business Advisory Committee to the Federal Communications Commission Regarding GEN Docket 90-314 (September 15, 1993) (SBAC Report) at 14-15, mentioned proposals by American Mobilecomm Technologies, Inc. and Digital Spread Spectrum Technologies, Inc. which advocate a "host license" arrangement that would establish and guarantee "technology affiliations".

The 20 MHz block will be auctioned at the basic trading area (BTA)<sup>20</sup> territory size. With 487 markets to auction, it will take considerably longer than auctioning the 51 MTA's in the two 30 MHz bands. For the 20 MHz band, Calcell recommends an auction process based on descending order of population, beginning with the largest BTA within the most populous MTA. The auction would then move to the second largest BTA within that MTA and proceed in descending order to the smallest BTA in the MTA. This allows a bidder wanting to consolidate BTA's within an MTA, to bid on the BTA's of interest sequentially. This will provide a geographic orientation to the bidding while preserving a bias towards the most populous territories first. Also, it may be important for a bidder to have the license of the largest BTA in a MTA before bidding on the other BTA's within that MTA. The 20 MHz auction should precede the 10 MHz auctions.

For the 10 MHz spectrum blocks Calcell recommends that the Commission again start with the most populous MTA and auction off the largest BTA's within that MTA in descending order of population. However, the Commission should go directly from an auction of the first BTA in band E to an auction of the same BTA in bands F and G before auctioning the second largest BTA in that MTA. Then this process should be repeated until all of the BTA's, within the most populous MTA, across all three bands have been auctioned. After this series of auctions have been completed, the auction would move to the largest BTA in the next most populous MTA.

By using this auction sequence, bidders interested in consolidating spectrum across 10 MHz bands will have the opportunity to do so sequentially,

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<sup>20</sup> Bands C and D have been designated as bands set aside for preferential groups including rural telephone companies small businesses and businesses owned by women and minorities. Calcell recommends the additional designation of the 20 MHz band as the Infrastructure Preference band.

on a BTA by BTA basis. The geographic consolidation option will still be preserved, but as a second order factor. Finally, this auction sequence will preserve a systematic movement from high population BTA's to low population BTA's as a third order factor. The one drawback to this structure is that it will require auction participants interested in bidding only on one individual BTA to know what MTA their BTA is a part of so that they can determine the approximate order of the bidding. Still this auction sequence should facilitate aggregating licenses on either a geographic basis or across spectrum bands in the most orderly fashion.

Since small businesses, women and minority owned businesses are not likely to be major consolidators of licenses<sup>21</sup>, the auction for the 10 MHz band set aside for designated entities (band D) should be held separately from the auctions for the other 10 MHz bands. Calcell recommends that the auction for this band begin with the with the most populous BTA and systematically proceed by BTA based on descending population. The auction for this 10 MHz band should be held after the auctions for the other 10 MHz bands.

If the Commission sticks to its recommendation to only use sealed bids for aggregating MTA's into nationwide networks, there is no need to address the order of opening sealed bids. However, sealed bids for multiple licenses that aggregate BTA's into MTA's, if allowed, should be opened on an MTA by MTA basis, in order of descending population. This order will be essentially identical to that of the oral auctions should the Commission decide that bids on BTA's can be aggregated into MTA's<sup>22</sup>. Furthermore, there need not be any limits set on the bids because the participants will know exactly what markets their bids

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<sup>21</sup> The threshold level for a small business status is assets under current SBA guidelines call for of \$6 million net worth or less and net income of \$2 million or less over the past two years. At this size even if it were raised substantially it would be difficult to acquire multiple licenses and have the resources to build out the facilities.

<sup>22</sup> See discussion below on using combinatorial bidding to aggregate BTA's into MTA's.

cover. Participants will not be exposed to situations where they can win more licenses than they wish as long as bids are opened on a MTA by MTA basis and the participants can withdraw sealed bids before each new round of oral bids.

### **Undue Market Power**

The Commission has limited the amount of spectrum any one firm can control to 40 MHz in any given territory<sup>23</sup>. This provision should be sufficient to prevent any concern of undue market power at the local market level. Likewise, across territories at the national or mega-regional level, Calcell does not foresee any problems caused by the undue market power of one entity. The large number of competitors in cellular, ESMR and PCS will likely prevent this from happening. However, the Commission should consider whether a nationwide entity can use combinatorial bidding to obtain licenses in a 30 MHz block, and in also in a 10 MHz block. This particular situation does create the potential for one entity to have excessive market power. As such, the Commission may want to consider establishing bidding rules that prevent one entity from controlling a nationwide 40 MHz PCS spectrum block.

### **Combinatorial Bidding**

In general, Calcell supports combinatorial bidding and believes that it should be allowed in the 10 MHz and 20 MHz bands for aggregating BTA's into MTA's. The Commission could accept sealed bids for MTA's for the 20 MHz and 10 MHz bands before the oral auctions begin. This would facilitate aggregating BTA's into market areas that would match the MTA's. It would also facilitate aggregating 10 MHz blocks into either a 20 MHz block, a 30 MHz block, or pairing it with either a 20 MHz or 30 MHz block. It will increase the administrative burden some, but the potential benefits outweigh the costs.

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<sup>23</sup> See Second Report and Order 93-451 GEN Docket No. 90-314 Adopted September 23, 1993. This 40 MHz of spectrum includes the 25 MHz of spectrum that cellular firms have access to as part of their licenses.

### **Limits For Sealed Bids**

Calcell does not believe that limits on sealed bids are necessary. As long as the bidder can withdraw bids before the oral auction commences there should be no reason why a bidder would face a situation where they could exceed their spending limit. The Commission, before the oral bidding begins on each set of BTA's that aggregate into an MTA, need simply allow bidders to withdraw sealed bids covering those licenses. This ensures that no bidder would be inadvertently placed in a position where their winning bids could exceed their financial limits.

### **Minimum Bids**

The Commission believes that no minimum bids should be established for PCS licenses but asked for comment. Calcell agrees with the Commission and asks that no minimum bids be placed on any spectrum. It is difficult if not impossible for Calcell to foresee a set of circumstances where minimum bids would be helpful. Any formula for setting the minimum bid will be arbitrary and likely to distort bids at the margin. This could result in some situations where meaningless minimum bids have been established because the minimum target is too low, or situations where bids have been set too high.

In some low population BTA's where two to three competitors already exist, auctioning spectrum to establish three to five new competitors will probably result in low bids for the spectrum because six or more wireless systems will be more than the market can bear<sup>24</sup>. Calcell believes that minimum bids may even be harmful because they send unintentional signals regarding the

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<sup>24</sup> Before PCS licenses are auctioned in May of 1994 most markets will already have two cellular licenses and possibly a ESMR license holder. As a minimum of three and possibly seven new competitors will be created through PCS auctions smaller markets will have a hard time economically justifying the need for five or more competitors. As such, one could argue that the license for the last entrant may be of little or no value since that wireless network will not be needed.

value of spectrum when the Commission has no real basis for establishing that value. In some situations, the Commission will accomplish nothing and create additional work for itself as licenses not auctioned initially, because they failed to meet an arbitrary minimum bid, will have to be auctioned again at some future date.

### **Alternative Payment Methods**

Payment options other than a lump sum payments due immediately upon award of the license will be necessary to provide economic opportunity and the opportunity for businesses owned by members of minority groups and women to participate in PCS. Capital formation and other barriers have historically been major factors in denying designated groups access to communications opportunities<sup>25,26</sup>. Evidence suggests that programs designed to help minority-owned businesses overcome financing obstacles work<sup>27</sup>. Several options exist including royalties and installment payments that may provide assistance to women and minority owned firms. Calcell believes either installment payments or royalties can be effective incentive tools if properly structured. However, Calcell favors the use of royalties in connection with its infrastructure preference concept.

Installment payments, with or without interest, allow the winning bid at an auction for a license to be paid over the life of the license. This assists the

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<sup>25</sup> See The SBAC Report, FCC Small Business Advisory Committee to the Federal Communications Commission Regarding GEN Docket 90-314 (September 15, 1993) (SBAC Report) at 14-15 which cited the special barriers to telecommunications ownership encountered by women and minority businesses.

<sup>26</sup>A "White Paper" by Ark Capital Management on Minorities and Women in the U.S. Economy While minority and women entrepreneurs create new business opportunities at very high rate, most of these businesses lack access to traditional capital resources. As a result of the financing shortage, many companies have not been able to reach full growth potential.

<sup>27</sup>Supra "White Paper" by Ark Capital Management reported that a recent Wall Street Journal survey rated Maryland as the top state for minority business. Maryland had the highest number of minority-owned businesses per 1000 people in the U.S. (5 per 1000). Maryland's success is attributed to a pro-active program of financing and business assistance for minority-owned companies.

license holder's ability to finance the venture which includes the costs to build-out facilities and working capital. Calcell believes that installment payments with no interest will be simpler for the Commission and bidders to implement and result in higher bids. The higher bids will arise because of the additional certainty bidder's will have in determining the exact amount of the installment payments. If interest payments are charged, bidders will reflect the cost of interest payments in their bids for the license, lowering their bid. For this reason there is no need to impose interest charges on top of a winning bid, as interest payments will already be imbedded in the bid.

In considering whether to impose interest charges on installment payments, the Commission should reflect the ability of large companies to borrow at rates below prime through the use of debt instruments such as commercial paper<sup>28</sup>. If for some reason the Commission decides interest should be charged on installment payments, interest rates should be set at levels below prime, to allow a level playing field with large corporate borrowers. If possible, the rate should be fixed at the time of the bid to provide more certainty for the bidder regarding future outlays. Removing the interest rate fluctuation uncertainty should result in higher overall bids, increasing the revenue available from the auctions.

Calcell's recommended payment option for designated entities is an initial payment of 10% of the total bid, plus annual royalty payments over the ten year life of the license. This option is preferable to installment payments with or without interest. The initial 10% deposit (payment) upon the award of the license helps ensure that only qualified entities bid on the licenses. The royalty payments allow the license holder to pay future payments based on the success

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<sup>28</sup> Nearly all blue chip firms borrow money from banks at rates 25 to 100 basis points below the prime rate. Many also issue their own commercial paper with short term interest rates typically more than 100 basis points below prime.

of the venture. If revenues fall below projections, then the license holder will pay less in royalties, providing some financial cushion. If revenues exceed projections, then the license holder can and will pay more in royalties. Calcell suggests a royalty level set at 3 to 4% of net annual revenues<sup>29</sup>.

Royalty payments act like sales or excise taxes at the margin. Thus, they provide slightly less incentive for rapid system deployment than installment payments. This represents the primary drawback of royalty payments. However, installment payments also act as a tax<sup>30</sup>. The increased administrative work load for the Commission caused by royalty payments represents a second potential drawback. However, a simple royalty structure based on a percentage of net revenues that is consistent with IRS guidelines can be used to determine royalty payments. This system could be designed to be straightforward to administer and collections can occur along with other taxes minimizing the administrative burden<sup>31</sup>.

Calcell sees several advantages to using royalty payments for women and minority owned businesses. First, royalty payments vary with revenues so that in the initial years of operation while the network is being built-out and cash flows are negative, royalty payments will be low<sup>32</sup>. Second, royalty payments are typically viewed by financial institutions and capital markets as an operating expense rather than as a part of a company's capital structure. This should make

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<sup>29</sup>The annual royalty payment should be set at a level high enough to payoff the total amount bid over the life of the license, but no so high as to saddle the venture with an anti-competitive cost position. Calcell's initial pro forma projections indicate that the 3 to 4% level is consistent with this objective.

<sup>30</sup> Payment of installments will take away from the enterprises ability to fund facilities and operations which will impact it ability to provide service as rapidly possible.

<sup>31</sup> For example, royalty payments could be written into the tax code and collected by the Department of the Treasury with the Commission supplying the names of firms that are subject to royalty payments. This system would require minimal administrative support from the Commission.

<sup>32</sup> In fact, most PCS ventures are unlikely to generate any substantial revenues in the first two years of operation as it will take at least that long to construct initial facilities for start up.

it easier for firms to raise capital for the venture without the burden of having installment payments considered directly in their ability to repay loans. Finally, the royalty payment method works well with Calcell's infrastructure preference concept. In effect, infrastructure preference holders will incur added costs for training programs, increased security and other expenses related to doing business in and rebuilding the infrastructure in designated enterprise zones. These costs should be offset by a credit or waiving of royalty payments. If the Commission prefers installment payments, these cost may also be offset by waiving installment payments.

### **TREATMENT OF DESIGNATED ENTITIES**

Congress established the objective of promoting economic opportunity for small businesses, rural telephone companies, and businesses owned by women and minorities as part of the Budget Act<sup>33</sup>. In implementing this objective, the Commission has a wide variety of means available<sup>34</sup>. Some or all of these "preference implementation tools" are required to provide the eligible entities with an economic opportunity to participate in PCS for reasons outlined below. However, the same package of preferences need not and should not be made available to all eligible groups on an equal basis because of vast difference in need.

#### **Rural Telephone Companies**

For rural telephone companies, few preferences appear necessary to ensure that these companies have an opportunity to participate in PCS. Rural telephone companies typically are assured of profitability through rate of return regulation. Furthermore, they have access to capital markets by virtue of their

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<sup>33</sup> See new subsection 4(D) of Section 309(j) of the Budget Act.

<sup>34</sup> The tools named by the Commission in the Budget Act NPRM include set-asides (i.e., certain designated spectrum blocks to be awarded in auctions open only to applicants that fall under the definitions for eligible entities), bidding preferences, preferential payment terms such as delayed or extended installment payments to qualifying bidders, or other procedures.

monopoly positions as the only local provider of telephone service in their service areas. As a result, the only real disadvantage they have versus other telephone companies is their size. Another issue they face is the possible substitution of wireless cellular or PCS service for their wire based service. To the extent that PCS could compete with their local phone service, rural telephone companies should have access to spectrum so that they can provide wireless services in their territory.

Calcell supports the Commission's proposal to set-aside a spectrum band where rural telephone companies can bid against other designated groups to obtain the spectrum they may need to offer wireless service. Because of their rural base of operations where populations are low, the amount of spectrum required to offer wireless service should likewise be small. Therefore, Calcell recommends that rural telephone companies be limited to bidding on spectrum in the 10 MHz band set-aside for designated entities. The 20 MHz band should be limited to small businesses, women and minority businesses. To the extent that rural telephone companies meet the eligibility criteria for small business status, they can participate in the auction of the 20 MHz spectrum as a small business. Otherwise, rural telephone companies can bid on spectrum like any other large business against other large businesses outside of the one 10 MHz band.

The Commission may want to take the additional step of allowing rural telephone companies to bid as a designated entity only in the BTA's where they have operations. Presumably, their disadvantage or critical need for spectrum arises because of the threat PCS poses to their wire-base service. Limiting their preferences in this manner would be consistent with the notion that the rural telephone companies need preferential treatment only in the areas where their market position is threatened by new wireless technologies.

## **Women and Minority Owned Businesses**

Women and minority businesses face unique challenges. Perhaps the most significant challenge that small, women and minority businesses face is obtaining adequate capital to finance operations. This challenge becomes particularly acute when the business is minority or female owned telecommunications business. The lack of representation of these two groups in the communications field is staggering<sup>35</sup>. Historical biases have made it difficult for women and minority owned companies to obtain access to capital and continue to prevent them from attaining much success in creating viable telecommunication businesses.

One example of the bias lenders appear to have against minorities can be found in the recent evaluation of home mortgage lending practices at banks and savings and loans where African-Americans were turned down for first mortgages at twice the rate of Caucasian applicants<sup>36</sup>. If this astounding difference in access to capital exists for the relatively simple and "objective" mortgage lending area, one is forced to conclude that much stronger biases exist in the more complex and "subjective" business lending area in which communication ventures must compete. While no study exists to Calcell's knowledge as comprehensive as the one for mortgage lending, the experiences of Calcell's management and other African-American business colleagues provides strong anecdotal evidence to support a bias in lending. Others cite evidence that substantiate this viewpoint<sup>37</sup>.

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<sup>35</sup>The SBAC report in its discussion of racial and gender disadvantages cited substantial quantitative evidence to support the notion that female and minority owned businesses are significantly under represented in the telecommunications field.

<sup>36</sup> A recent study of bank lending practices published by the Wall Street Journal found that a systematic bias against African-Americans and Hispanic Americans existed in mortgage lending after adjusting for differences in income.

<sup>37</sup> The SBAC report cited testimony from Department of Commerce expert Joann Anderson that minorities frequently do not or cannot use traditional sources of financing, and that the most

Clearly more must be done for minority owned firms, and to a lesser extent women owned firms to overcome historical capital formation biases so these designated entities can achieve meaningful participation in PCS. The FCC's SBAC Report recommended several proposals to this end, which Calcell wholeheartedly endorses<sup>38</sup>:

- Allow minority and female applicants to certify financial qualifications based on "highly confident" letter and letters of intent from qualified investment banking firms, venture capital funds and Specialized Small Business Investment Companies (SSBICs).
- Awarding Innovator's bidding credits equal to 10% or more of an applicants bid in situations where the eligibility criteria can be defined and decisions reached in the time frame available before auctions must commence<sup>39</sup>.
- Allow installment payment and royalty payments for qualified small, female and minority businesses.
- Authorize distress sales to small business entities where winning bidders are unable to pay, or complete construction requirements.
- Seek legislation establishing a communications capital fund from revenues generated by spectrum auctions.
- Use of tax certificates, and other financing techniques to encourage capital formation for owners and investors in minority owned and controlled licensees. Also, SBA licensed SSBICs that furnish financial and technical

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frequent source of capital is family savings or friends. This was also cited in a report on Minorities and Women in the U.S. Economy by Ark Capital Management.

<sup>38</sup> The SBAC includes some additional recommendations as well. However, the ones provided in the text receive Calcell complete and unconditional support.

<sup>39</sup> Calcell's Infrastructure Preference concept generally fits into the category of an innovator's bidding credit. However, Infrastructure Preferences provide for larger credits and an on-going evaluation process for continued eligibility.