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

In the Matter of

Amendment of Parts 20 and 24 of the
Commission's Rules -- Broadband
PCS Competitive Bidding and the
Commercial Mobile Radio Service
Spectrum Cap

Amendment of the Commission's
Cellular/PCS Cross-Ownership Rule

WT Docket No. 96-59

GN Docket No. 90-314

REPORT AND ORDER

Adopted: June 21, 1996  Released: June 24, 1996

By the Commission:

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I. Introduction and Executive Summary

In this Report and Order, we modify our competitive bidding and ownership rules for the Personal Communications Services in the 2 GHz band ("broadband PCS"). Many of our rule modifications concern the treatment of designated entities, i.e., small businesses, rural telephone companies, and businesses owned by members of minority groups and women, under our rules for the F block. We also amend other broadband PCS rules in order to encourage sincere bidding, streamline the auction process, and lessen administrative burdens. In addition, in response to the remand from the U.S. Court of Appeals for the Sixth Circuit in Cincinnati Bell Telephone Co. v. FCC, we modify our rules governing cellular licensees' ownership of broadband PCS licenses in all frequency blocks.

1. As we explained in the Notice of Proposed Rule Making we were prompted by the Supreme Court's decision in Adarand Constructors, Inc. v. Peña to reexamine our race- and

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1 The D, E, and F blocks, each consisting of 493 10 MHz BTA licenses, are among the six frequency blocks designated by the Commission for broadband licensed PCS. Amendment of the Commission's Rules to Establish New Personal Communications Services, Memorandum Opinion and Order, 9 FCC Rcd 4957, 4978-5082 (1994).

2 69 F.3d 752 (6th Cir. 1995).

3 Amendment of Parts 20 and 24 of the Commission's Rules, Notice of Proposed Rule Making, WT Docket 96-59, FCC 96-119, 61 Fed. Reg. 13133 (March 26, 1996) ("Notice"). In response to this Notice, 63 comments and 22 reply comments were filed. A list of commenters is attached as Appendix D.

gender-based F block rules. We adopted these rules in the *Competitive Bidding Fifth Report and Order* in order to fulfill our mandate under Section 309(j) of the Communications Act of 1934, as amended ("Communications Act"), to provide opportunities for businesses owned by members of minority groups and women to participate in the provision of spectrum-based services. After we adopted these rules, however, the Supreme Court held in *Adarand* that any federal program that makes distinctions on the basis of race must satisfy the strict scrutiny standard of judicial review.

2. Having examined the comments submitted in response to the *Notice*, we conclude that the present record is insufficient to support our race-based F block rules under the strict scrutiny standard, or to support our gender-based rules under the intermediate scrutiny standard that currently applies to those rules. We have considered the need to award the remaining broadband PCS licenses expeditiously and to promote the rapid deployment of new services to the public without judicial delays, as well as the statutory objective of disseminating licenses among a wide variety of applicants, including designated entities. Bearing these factors in mind, we conclude that, to avoid uncertainty and the delay that would likely result from legal challenges to the special provisions for minority- and women-owned businesses in our broadband PCS rules, it is appropriate to make our F block rules race- and gender-neutral. We believe that our action here is consistent with our obligations under Section 309(j).

3. As we explained in the *Notice*, our experience conducting the A, B, and C block broadband PCS auctions also led us to examine other aspects of our rules, and we have determined that we should take certain steps to streamline our procedures and minimize the possibility of insincere bidding and bidder default. To achieve these goals, to make our F

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6 *Adarand*, 115 S. Ct. at 2113.

7 47 U.S.C. §§ 309(j)(3)(A) and (B).


9 We also have initiated a comprehensive rule making proceeding to explore market barriers to women- and minority-owned businesses as well as small businesses pursuant to Section 257 of the Communications Act. See Section 257 Proceeding to Identify and Eliminate Market Entry Barriers for Small Businesses, *Notice of Inquiry*, GN Docket No. 96-113, FCC 96-216 (rel. May 21, 1996) ("Market Entry Notice of Inquiry").
block rules race- and gender-neutral, and in response to the Cincinnati Bell decision, we make the following changes:

- We amend Section 24.709 and eliminate Section 24.715 of the Commission's Rules to make the 50.1 percent "control group" equity structure, which previously was available only to women- and minority-owned businesses for purposes of F block eligibility, available to all small businesses and entrepreneurs.\(^\text{10}\)

- We amend Section 24.720 of the Commission's Rules to eliminate the exception to our F block affiliation rules that excludes the gross revenues and assets of certain affiliates controlled by investors who are members of the applicant’s control group.\(^\text{11}\)

- We amend Section 24.716 of the Commission's Rules to eliminate two of the installment payment plans available to F block applicants and extend the most favorable plan to all small businesses.\(^\text{12}\) We also shorten the interest-only payment period of this plan from six to two years.

- We amend Section 24.717 of the Commission's Rules to eliminate bidding credits based on minority- and women-owned status. Instead, we provide for a two-tiered small business bidding credit.\(^\text{13}\)

- We amend our definition of "rural telephone company" in Section 24.720 of the Commission's Rules to make it conform to the definition in the Telecommunications Act of 1996 ("1996 Act").\(^\text{14}\)

- We amend Sections 24.706 and 24.716 of the Commission's Rules to raise upfront payments for the D, E, and F blocks to $0.06 per MHz-pop and the down payment for the F block to 20 percent.\(^\text{15}\)

- We amend Section 24.839(d) of the Commission's Rules to relax the restriction on designated entities' ability to transfer broadband PCS licenses.\(^\text{16}\)

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\(^{11}\) 47 C.F.R. § 24.720.

\(^{12}\) 47 C.F.R. § 24.716.

\(^{13}\) 47 C.F.R. § 24.717.

\(^{14}\) 47 C.F.R. § 24.720.


\(^{16}\) 47 C.F.R. § 24.839(d).
We eliminate Section 24.204 and amend Section 24.229 of the Commission's Rules to abolish our cellular/PCS cross-ownership rule and our PCS spectrum cap and rely on the 45 MHz cap on Commercial Mobile Radio Services ("CMRS") spectrum in Section 20.6.\(^7\)

We amend Section 20.6 of the Commission's Rules to eliminate the 40 percent attribution threshold’s application to ownership interests held by minority- and women-owned companies for purposes of the CMRS spectrum cap; expand the post-auction divestiture provisions to come into conformity with those previously applied in our cellular/PCS cross-ownership rule; and allow an affirmative showing that an otherwise attributable ownership interest should not be attributed to its holder.\(^8\)

We amend Section 24.813 of the Commission's Rules to reduce ownership information disclosure requirements.\(^9\)

4. To expedite the delivery of broadband PCS services to the public, we plan to offer the D, E, and F block licenses together in one simultaneous multiple round auction. Recognizing that there are operational concerns with auctioning all 1,479 licenses in the same auction, however, we also delegate authority to the Wireless Telecommunications Bureau to conduct two concurrent auctions if circumstances warrant. In general, we favor a single auction because of the efficiency it will provide to bidders and the Commission and the speed with which it will deliver the 10 MHz broadband PCS licenses into the hands of parties that can begin providing service to the public.

5. Finally, we address a number of other issues that were raised by commenters. We decline to modify our limitation on the total number of licenses that may be won by bidders in the C and F block auctions. In response to concerns about the impact of our rules regarding bids that are made erroneously, we amend Section 24.704 of our rules to modify our bid withdrawal payment requirements.

II. Rules Affecting Designated Entities

A. Meeting the Adarand Standard

6. **Background.** In the Notice, we explained the history of our race- and gender-based F block rules, the statutory objectives they were designed to promote, and the impact of the Supreme Court's decision in *Adarand v. Peña*. As we discussed, an intermediate scrutiny standard of review was applied to federal race- and gender-based programs at the time our F

\(^{17}\) 47 C.F.R. §§ 20.6, 24.204, & 24.229.

\(^{18}\) 47 C.F.R. § 20.6.

\(^{19}\) 47 C.F.R. § 24.813.
block rules were adopted. In Adarand, however, the Supreme Court held that all racial classifications, whether imposed at the federal, state or local government level, must be analyzed by a reviewing court under strict scrutiny, which requires such classifications to be narrowly tailored to further a compelling governmental interest. An intermediate scrutiny standard of review (under which a provision is constitutional if it serves an important governmental objective and is substantially related to achievement of that objective) continues to apply to gender-based measures. We note, however, that the Supreme Court has not addressed constitutional challenges to federal gender-based programs since Adarand.

7. In the Notice, we observed that judicial precedent indicates that only a record of discrimination against a particular racial group would support remedial measures designed to benefit that group and that generalized assertions of discrimination are inadequate. We explained that, although we have some general evidence of discrimination against certain racial groups, none of the evidence we have appears adequate to satisfy strict scrutiny. We requested comment on a number of questions related to this analysis, including whether compensating for discrimination in lending practices and in practices in the communications industry constitutes a compelling governmental interest. We also asked interested parties to comment on non-remedial objectives that might be considered compelling governmental interests, such as increased diversity in ownership and employment in the communications industry or increased industry competition. We asked parties to submit statistical data, personal accounts, studies, or any other data relevant to the entry of specific racial groups into the field of telecommunications, and we asked whether our race-based provisions are narrowly tailored to serve the interests that commenters assert to be compelling governmental interests. We also tentatively concluded that the present record in support of our gender-based F block rules may be insufficient to satisfy intermediate scrutiny, and we asked commenters to submit evidence relevant to the entry of women into the field of telecommunications.

8. In the Notice, we also tentatively concluded that we should not delay the F block auction for the amount of time it would take to adduce sufficient evidence to support our race- and gender-based F block provisions, and that proceeding with the F block auction with these rules intact would not serve the public interest because it might result in litigation that ultimately would delay the auction of additional broadband PCS licenses and, thus, postpone the

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20 Adarand, 115 S. Ct. at 2113.

21 See, e.g., Ensley Branch, NAACP v. Seibels, 31 F.3d 1548, 1579-80 (11th Cir. 1994); Contractors Association v. City of Philadelphia, 6 F.3d 990, 1009-10 (3d Cir. 1993); Lamprecht v. FCC, 958 F.2d 382, 391 (D.C. Cir. 1992); Coral Construction Co. v. King County, 941 F.2d 910, 930-31 (9th Cir. 1991) cert. denied, 502 U.S. 1033 (1992).


23 Notice at ¶ 20-22.

24 Id. at ¶ 23.
introduction of new competition to the marketplace. We tentatively concluded that, if we were unable to gather sufficient evidence to support our race- and gender-based provisions in this proceeding, we should eliminate these provisions from our rules and proceed as expeditiously as possible to auction the remaining broadband PCS licenses.25

9. Comments. The majority of commenters addressing our present record in support of race-based F block provisions believe that this record is insufficient to withstand strict scrutiny.26 Moreover, no parties offered specific anecdotal or statistical evidence to support our race-based F block rules. CIRI, however, states that Congress and the Commission have been presented with substantial evidence of the need to promote economic opportunity for minorities, particularly in the communications industry.27 Encouraging the Commission to review this evidence, CIRI contends that the Commission should retain its minority preference provisions and can justify these provisions under the strict scrutiny standard mandated by Adarand.28 According to Ondas, the lack of Latino-owned C block license winners serves as statistical and anecdotal evidence to support the F block raced-based rules.29

10. With respect to our gender-based F block provisions, the majority of commenters addressing our present record agree with our tentative conclusion that this record may be insufficient to satisfy the requirements of intermediate scrutiny.30 No commenters offered data to supplement our record supporting gender-based provisions. AWRT and Antigone, however, contend that the record in support of our gender-based provisions will withstand intermediate scrutiny, and they ask the Commission to retain gender-based preferences for the F block auction.31 These commenters argue that the gender-based provisions are substantially related to the achievement of a goal mandated by Congress and that there are no more narrowly tailored alternatives available, nor any that put less of a burden upon men and male-owned entities.32

25 Id. at ¶ 26.


27 Cook Inlet Region, Inc. Comments at 21-22 ("CIRI").

28 Id. at 17-19.

29 Ondas Communications Services, Inc. Comments at 1 ("Ondas").

30 See Sprint Comments at 2; The Alliance Comments at 2; US West Comments at 1, n.1; Auction Strategy Comments at 1; Columbia Comments at 1.

31 American Women in Radio and Television Comments at 5-8 ("AWRT"); Antigone Communications L.P. Comments at 2-6 ("Antigone").

32 AWRT Comments at 9; Antigone Comments at 4.
11. Most commenters support making the F block auction rules race- and gender-neutral. AirLink and Auction Strategy, for example, recommend that, as in the C block auction, the Commission extend to all small businesses the same special provisions originally provided to small minority- and women-owned companies. DCR, a minority- and women-owned business, believes that the Commission should forego the use of race- and gender-based special provisions in the F block to ensure that small businesses have a prompt and meaningful opportunity to compete for 10 MHz licenses. In this connection, DCR notes that providing incentives to all small businesses will encourage the participation of minority- and women-owned businesses. Similarly, PCIA and Gulfstream believe that the Commission can best serve its statutory duties to assist minority- and women-owned businesses by adopting generous rules for small businesses. Devon, a women-controlled company, also agrees with the proposal to eliminate race- and gender-based provisions, stating that it is critical to avoid delays in licensing. AT&T argues that we should not repeat the use of special provisions for small businesses in the F block in light of the "undesirable results" of the C block auction. Allied opposes proceeding to auction with race- and gender-neutral rules without first conducting a "Croson study."

12. Decision. Having evaluated the record before us, we revise our F block rules to make them race- and gender-neutral. Overall, the commenters agree that this approach will best serve our goal of rapidly conducting the F block auction with the least risk of judicial delay. Moreover, the arguments presented against it were, for the most part, already considered in the

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33 See Sprint Comments at 2; Auction Strategy Comments at 1; The Alliance Comments at 3; Phoenix L.L.C. Comments at 2-3 ("Phoenix"); Conestoga Wireless Company Comments at 3 ("Conestoga"); Iowa L.P. 136 Comments at 4-5 ("Iowa"); National Telecom PCS, Inc. Comments at 2-3 ("NatTel"); North Coast Mobile Communications, Inc. Comments at 3-5 ("NMC"); PCS Development Corporation Comments at 2-4 ("PCSD"); Harvey Leong Comments at 2 ("Leong"). See also Coalition of New York Rural Telephone Companies Comments at 2-3 ("NY Coalition"); U.S. Intelco Wireless Communications, Inc. Comments at 4-5 ("USIW"); National Telephone Cooperative Association Comments at 2 ("NTCA"); Telephone Electronics Corp. Comments at 12 ("TEC"); Personal Communications Industry Association Comments at 6-7 and Reply Comments at 2-3 ("PCIA"); Columbia Comments at 1 (offering alternatives to our proposal to proceed with the F block in generally the same way we proceeded with the C block but nonetheless supporting our conclusion to make our rules race- and gender-neutral).

34 AirLink L.L.C. Comments at 13 ("AirLink"); Auction Strategy Comments at 1.

35 DCR Communications, Inc. Comments at 2-4 ("DCR").

36 Id. at 4.

37 PCIA Comments at 7; Gulfstream Communications, Inc. Comments at 5-6 ("Gulfstream").

38 Devon Mobile Communications, L.P. Comments at 2-3 ("Devon").

39 AT&T Wireless Services, Inc. Comments at 4-6 ("AT&T"); see also TEC Comments at 2 (noting that TEC would not object to race- and gender-based preferences if such preferences were justified by a record sufficient to satisfy constitutional requirements).

40 Allied Communications Group, Inc. Comments at 4 ("Allied"). The Supreme Court said in Richmond v. J.A. Croson Co. that significant statistical disparities between the level of minority participation in a particular field and the percentage of qualified minorities in the applicable pool could permit an inference of discrimination that would support the use of racial classifications intended to correct those disparities. Croson, 488 U.S. 469, 507 (1989). Croson studies have been undertaken in the past to determine whether such disparities exist at the state or local level.
Competitive Bidding Sixth Report and Order in which we concluded that the C block auction rules should be race- and gender-neutral. Significantly, this conclusion was upheld by the D.C. Circuit Court of Appeals, which held in Omnipoint v. FCC that we acted reasonably in concluding that, in light of the additional time it would take to develop a record to support the race- and gender-based provisions for the C block, we should revise these rules by providing the most favorable terms to all small businesses, i.e., "leveling benefits upward." In light of the comments and the Omnipoint decision, and because we do not have sufficient evidence to support our F block race- and gender-based provisions in this proceeding, we conclude that making our F block rules race- and gender-neutral will serve the public interest by enabling us to auction the remaining broadband PCS licenses as expeditiously as possible.

13. We recognize, as CIRI points out, that we have been presented with important evidence of the need to promote economic opportunity for minorities. Thus, in the Competitive Bidding Fifth Report and Order when we adopted the race-based provisions for the entrepreneurs' blocks assuming an intermediate level of scrutiny, we cited studies and other evidence to support the existence of widespread discrimination against minorities in lending practices. The evidence that we cited showed the difficulty African- and Hispanic-Americans have in obtaining mortgage loans; the difficulty African-American business borrowers face in raising capital; and the shortage of capital as the principal problem faced by minorities seeking ownership opportunities in the broadcast industry. We believe such data are important. However, CIRI has not demonstrated that this information will be sufficient to provide a basis for measures benefitting specific racial groups seeking to participate in broadband PCS.

14. We also believe that at this time we cannot agree with AWRT and Antigone's proposal that we retain the gender-based F block provisions. As noted above, the Supreme Court has not addressed the level of scrutiny courts must apply to gender-based programs since Adarand. This issue is the subject of a case currently pending before the Court. Additionally we observe that the D.C. Circuit Court of Appeals stayed the C block auction under an intermediate scrutiny standard on the basis of race- and gender-based provisions identical to those adopted for the F block. Thus, we believe that retaining the gender-based provisions would

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41 Omnipoint v. FCC, 78 F.3d 620, 633.
42 Competitive Bidding Fifth Report and Order, 9 FCC Rcd at 5573-74.
43 Id. at 5573.
44 Id. at 5573-74.
45 Id. at 5576-78.
46 See supra note 22.
47 Telephone Electronics Corp. v. FCC, No. 95-1015 (D.C. Cir. Mar. 15, 1995) (order granting stay). Under Metro Broadcasting, Inc. v. FCC, 497 U.S. 547 (1990), the governing case law at the time, intermediate scrutiny was applied to both race- and gender-based provisions.
create a substantial risk of delaying the F block auction due to litigation and could result in future legal challenges in the course of licensing F block winners.\footnote{48}

15. In deciding to make our F block rules race- and gender-neutral, we are balancing competing objectives under Section 309(j), including mandates to provide opportunities for women and minorities while at the same time to promote competition and the rapid delivery of services to the public.\footnote{49} On balance, we conclude that making our rules race- and gender-neutral is the best approach at this time, and the record reveals that many small businesses and women- or minority-owned entities agree with this assessment.\footnote{50} Also, we believe the impact of this change in our rules may not be significant, because many minority- and women-owned entities are small businesses and will therefore qualify for the same special provisions that would have applied to them under our previous rules.\footnote{51} Thus, we believe that our amended rules will continue to fulfill our mandate under Section 309(j) to provide opportunities for minority- and women-owned businesses to become providers of spectrum-based services.

16. Moreover, as noted above, we have initiated a separate inquiry to gather evidence regarding barriers to entry faced by minority- and women-owned firms as well as small businesses.\footnote{52} If a sufficient record can be adduced, we will consider race- and gender-based provisions for future auctions. Toward this end, we have already gathered some information from recent auctions, including data on women- and minority-owned business participation. Minority- and women-owned firms participated in the C block auction in the absence of race- and gender-based rules, for example, and 36 percent of the winning bidders were women- and minority-owned firms.\footnote{53} On the other hand, we note that in other auctions where no race- or gender-based preferences were available, minority- and women-owned firm participation has not been as substantial. We will continue to track such information and evaluate it with other data gathered with the goal of developing a record to support race- and gender-based provisions that will satisfy judicial scrutiny. We note that by September 1997 we are required to submit a report to Congress on this issue.\footnote{54} Finally, we are looking for other ways to reduce barriers to entry for women- and

\footnote{48} For similar reasons, we will not adopt Antigone's proposal that we exempt women-owned applicants from the 25 percent foreign ownership threshold adopted in Market Entry and Regulation of Foreign-Affiliated Entities, \textit{Report and Order}, IB Docket No. 95-22, FCC 95-475 (Nov. 30, 1995). Antigone Comments at 6.

\footnote{49} \textit{47 U.S.C. § 309(j)(3)}.

\footnote{50} \textit{See, e.g.,} DCR Comments at 2-4; Devon Comments at 2; PCSD Comments at 4-5.


\footnote{52} \textit{See supra} note 9.

\footnote{53} Thirty-two of the 89 winning bidders claimed women- and/or minority-owned status. \textit{C Block Auction Closing Press Conference, Press Package} (May 6, 1996).

\footnote{54} \textit{47 U.S.C. § 309(j)(12)(D)}. 

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minority-owned businesses, such as allowing partitioning and disaggregation of broadband PCS licenses, an adjustment to our rules that may be helpful to small businesses generally.\footnote{55} 

17. Our decision to make the F block auction rules race- and gender-neutral leads us to modify specific F block provisions. As explained below, these provisions include the control group equity structures, the affiliation rules, installment payment plans, and bidding credits.

1. Control Group Equity Structures

18. **Background.** The F block auction is limited to applicants that, together with their affiliates and persons or entities that hold interests in them, have gross revenues of less than $125 million in each of the last two years and total assets of less than $500 million. In the *Notice*, we described the control group equity structures that applicants may use to establish eligibility to participate in the F block auction. Under the first equity structure option, the control group must hold at least 25 percent of the applicant's total equity.\footnote{56} Of that 25 percent, at least 15 percent must be held by "qualifying investors."\footnote{57} If these and certain other requirements are met, the remaining 75 percent of the applicant's equity may be held by other non-controlling investors, and the gross revenues and total assets of any such investor will not be attributed to the applicant provided that the investor holds no more than 25 percent of the total equity of the applicant.\footnote{58} Under the second equity structure option, available to minority- and women-owned applicants only,\footnote{59} the control group must own at least 50.1 percent of the applicant's total equity. Of that 50.1 percent equity, at least 30 percent must be held by qualifying investors who are members of minority groups or women.\footnote{60} If these and certain other requirements are met, the remaining 49.9 percent of the applicant's equity may be held by non-controlling investors, and the gross revenues and total assets of any such investor will not be attributed.\footnote{61}

19. In the *Notice*, we tentatively concluded that, in the absence of a sufficient record to support offering the 50.1/49.9 percent equity structure only to women- and minority-owned

\footnote{55} The Commission plans to issue a notice of proposed rule making seeking comment on whether our partitioning and disaggregation rules for broadband PCS should be changed.

\footnote{56} 47 C.F.R. § 24.715(b)(5).

\footnote{57} *Id.* Under our rules, "qualifying investors" are defined as members of or holders of an interest in members of the applicant's or licensee's control group whose gross revenues and total assets, when aggregated with those of all other attributable investors and affiliates, do not exceed the gross revenues and total assets restrictions specified in our rules with regard to eligibility for entrepreneurs' block licenses. 47 C.F.R. § 24.720(n)(1).


\footnote{60} 47 C.F.R. § 24.715(b)(6)(i)(A).

\footnote{61} 47 C.F.R. § 24.715(b)(4).
A "small business" is defined as an entity that, together with its affiliates and persons or entities that hold interest in such entity and their affiliates, has average gross revenues that are not more than $40 million for the preceding three years. 47 C.F.R. § 24.720(b)(1). An "entrepreneur" is an entity that, together with its affiliates and persons holding interests in the entity and their affiliates, has gross revenues of less than $125 million in each of the last two calendar years and total assets of less than $500 million. 47 C.F.R. § 24.709(a).

20. Comments. Most commenters support extending the 50.1/49.9 equity option to all entrepreneurs and small businesses either expressly or by simply stating that the F block rules should mirror the C block rules. Vanguard and NCMC, for example, advocate this approach because it has already passed judicial review. Many commenters cited interference with pre-existing ownership and investment relationships as their reason for opposing any other change to the control group structures. AirLink, for example, states that the control group rules are now familiar to the investment community and industry and that their certainty and specificity provide a road map for investors and entrepreneurs.

21. Other commenters oppose extending the 50.1/49.9 percent equity structure option to all small businesses and entrepreneurs because they claim that it has become a vehicle for subsidizing large companies and that it has resulted in convoluted applicant ownership structures for designated entities. Radiofone argues that our extension of the 50.1/49.9 percent equity option to all small businesses in the C block was based on the fact that many minority- and women-owned businesses had already established equity structures based on this provision, a justification that does not apply to the F block. Radiofone also asserts that because no 10 MHz licenses have been issued and large businesses will not have a "headstart" over entrepreneurs, time considerations do not compel an extension of the 50.1/49.9 percent equity structure option as

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62 A "small business" is defined as an entity that, together with its affiliates and persons or entities that hold interest in such entity and their affiliates, has average gross revenues that are not more than $40 million for the preceding three years. 47 C.F.R. § 24.720(b)(1). An "entrepreneur" is an entity that, together with its affiliates and persons holding interests in the entity and their affiliates, has gross revenues of less than $125 million in each of the last two calendar years and total assets of less than $500 million. 47 C.F.R. § 24.709(a).

63 See Ad Hoc Rural PCS Coalition Comments at 18 ("PCS Coalition"); Sprint Comments at 2-3; PCSD Comments at 4-5; Vanguard Comments at 2-3; CIRI Comments at 3; DCR Comments at 4-5; Devon Comments at 6; Iowa Comments at 4-5; NCMC Comments at 5-6; Mid-Plains Telephone, Inc. Comments at 1-2 ("Mid-Plains"); Leong Comments at 4; WPCS, Inc. Comments at 1 ("WPCS"); PCIA Comments at 9 and Reply Comments at 3.

64 Vanguard Comments at 2-3; NCMC Comments at 6.

65 See, e.g., PCS Coalition at 18; DCR Comments at 4; Devon Comments at 6; NCMC Comments at 6.

66 AirLink Comments at 14.

67 Point Enterprises, Inc. Comments at 2 ("Point"); see also NTCA Comments at 4.

68 NY Coalition Comments at 3.
they did for the C block. Radiofone further argues that removing this exception completely from the F block rules should not prejudice minority- or women-owned businesses, which will have time to utilize other financing options.

22. Conestoga, addressing directly the issue of whether we should change the financial eligibility threshold for the F block, contends that we should employ our previously established thresholds. Conestoga also asserts that C block winners should be allowed to participate in the F block auction so long as the value of their C block license does not change their financial status. Similarly, AirLink and other commenters argue that C block licenses should be counted as assets by C block auction winners in determining whether they are eligible for the F block auction. On the other hand, some commenters, such as Sprint, DCR, the Alliance, Western Wireless, NextWave, and Devon, advocate excluding C block licenses from F block applicants' assets. Other commenters suggest ways of conducting the F block auction that would amount to a change in the financial eligibility threshold. For example, the PCS Coalition, the NY Coalition, USIW, Liberty, and the NTCA advocate a 10 MHz spectrum block set-aside for small businesses and rural telephone companies. TEC and Mountain Solutions propose setting aside all three 10 MHz blocks as small business blocks, as the only approach that will allow small businesses to aggregate 30 MHz of PCS spectrum. Conversely, AT&T argues that all three 10 MHz blocks should be open to all competitors. Finally, Gulfstream proposes that all CMRS licensees be precluded from bidding on the F block to prevent spectrum warehousing and promote competition.

23. Decision. As part of our decision to make the F block rules race- and gender-neutral,

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69 Radiofone, Inc. Comments at 9 ("Radiofone").
70 Radiofone Reply Comments at 19.
71 Conestoga Comments at 3.
72 Id.
73 AirLink Comments at 10. See also CIRI Comments at 10-11; NatTel Comments at 4; NCMC Comments at 8; NCMC Reply Comments at 6.
74 Sprint Comments at 7; DCR Comments at 6-7; Alliance Comments at 4; Western Wireless Corp. Comments at 28 ("Western"); NextWave Telecom, Inc. Reply Comments at 5 ("NextWave"); Devon Comments at 11.
75 PCS Coalition Comments at 4; NY Coalition Comments at 4-5; USIW Comments at 4; Liberty Cellular, Inc. Comments at 6-7 ("Liberty"); NTCA Comments at 4. See also Leong Comments at 4 (F block should be set aside for small and very small businesses).
76 TEC Comments at 4-5; Mountain Solutions Comments at 4; see also Ken W. Bray Comments at 2 ("Bray"); but see BellSouth Reply Comments at 5.
77 AT&T Reply Comments at 3.
78 Gulfstream Comments at 12-13.
we conclude that the 50.1/49.9 percent equity option should be available to all small businesses and entrepreneurs. As we stated in the *Competitive Bidding Sixth Report and Order* (where we made this same modification to the C block rules), we believe that applicants and the public interest will be better served if we proceed in a manner that both reduces the likelihood of legal challenges and enhances the opportunities for a wide variety of applicants, including designated entities, to obtain licenses and rapidly deploy broadband PCS.\(^{79}\) The D.C. Circuit Court of Appeals agreed with this approach when it upheld our decision to level benefits upward for C block applicants.\(^{80}\) We also adopt this rule modification because we believe that making the same equity structures available to both C and F block applicants is necessary so that C block participants will not be required to structure themselves differently in order to participate in the F block auction. When we extended the 50.1/49.9 percent equity option to all small business applicants in the C block, we did so in part because minority- and women-owned applicants had already structured themselves under this rule, and we determined that retaining it would help to preserve existing business relationships formed upon such reliance. Providing for the same control group structures for the F block will benefit C block participants that also wish to apply for the F block. Moreover, it will benefit other entities that did not participate in the C block auction because it continues equity structures that are familiar to the industry and the financial community.\(^{81}\)

24. We decline to make adjustments to the financial eligibility thresholds in our F block rules, which were previously justified in the *Competitive Bidding Fifth Report and Order* promoting diversity of licensees without excluding firms that are likely to have the financial ability to provide sustained competition.\(^{82}\) We believe that retaining the same thresholds as those used for the C block will allow for participation by entities which used our C block rules as guidelines for determining their structure in preparation for the F block auction. Moreover, these thresholds were used by C block bidders, many of whom will be interested in participating in the F block auction. We decline to further restrict participation in the F block (or any of the other 10 MHz blocks) to small businesses and rural telephone companies. We believe that setting aside the F block for both entrepreneurs and small businesses will be sufficient to achieve our objectives of providing opportunities for small businesses to obtain 10 MHz licenses and ensuring broad dissemination of 10 MHz licenses.

25. In addition, we decline to treat C block licenses as assets that could potentially preclude C block winners from F block eligibility, as some commenters advocate. We believe it would be unfair to disqualify C block winners on the basis of their success in acquiring capital to

\(^{79}\) *Competitive Bidding Sixth Report and Order*, 11 FCC Rcd at 146.

\(^{80}\) *See Omnipoint*, 78 F.3d at 633.

\(^{81}\) We note that in the *Competitive Bidding Sixth Report and Order*, we clarified the definition of "qualifying investor" in Section 24.720(n) of the Commission's Rules for purposes of our control group rules. *Competitive Bidding Sixth Report and Order*, 11 FCC Rcd at 149-150.

\(^{82}\) *Competitive Bidding Fifth Report and Order*, 9 FCC Rcd at 5586.
participate in that auction, primarily because we have indicated previously that the C and F blocks are linked. Specifically, we have stated that the C and F blocks occupy contiguous spectrum that offers the opportunity for entrepreneurs to efficiently aggregate spectrum. Also, when we imposed a limitation on the total number of licenses that may be awarded to a single entity in the entrepreneurs’ blocks, we provided that "no single entity may win more than 10 percent of the licenses available in the entrepreneurs’ blocks, or 98 licenses. These licenses may all be in frequency block C or all in frequency block F, or in some combination of the two blocks." We believe that treating C block winners’ licenses as an asset for purposes of eligibility for the F block auction could frustrate business plans and auction strategies made in reliance on our previous statements. We note also that it is uncertain whether the C block licenses will be issued before the F block auction begins.

26. For the reasons stated above, we will not consider C block licenses as assets for purposes of F block eligibility, but we do believe that other types of licenses should be considered as assets. Applicants should be aware that other licenses (such as Specialized Mobile Radio (“SMR”), narrowband PCS, broadband PCS A and B blocks, and cellular) should be included in their total asset calculations for the F block.

2. Affiliation Rules

27. Background. In the Notice, we discussed the exceptions to our affiliation rules applicable to the F block. These rules identify all individuals and entities whose gross revenues and assets must be aggregated with those of the applicant to determine whether the applicant exceeds the financial caps for the entrepreneurs’ blocks or for small business size status. There are two exceptions to these rules. Under the first exception, Indian tribes and Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act, 43 U.S.C. § 1601 et seq., are not considered affiliates of an applicant owned and controlled by such tribes and corporations. Under the second exception, the gross revenues and assets of affiliates controlled by minority investors who are members of the applicant’s control group are not attributed to the applicant.

28. In the Notice, we requested comment on whether, if we determined that the record

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83 Id. at 5587-88.

84 Id. at 5606.

85 See, e.g., NextWave Reply Comments at 5-6.

86 47 C.F.R. § 24.720(l)(11)(i). This exception, however, provides for a rebuttable presumption that revenues derived from gaming pursuant to the Indian Gaming Regulatory Act will be included in the applicant's eligibility determination. See 25 U.S.C. § 2701 et seq.

87 We note that this exception for F block applicants, which was originally codified as a rule applying to both the C block and the F block at 47 C.F.R. § 24.720(l)(11)(ii), was inadvertently eliminated from our rules when we modified it for purposes of the C block auction.
was insufficient to support an exception to our affiliation rules based on race, we should amend our affiliation rule for the F block to eliminate the exception pertaining to minority investors, or whether we should modify the exception as we did for the C block. This modified rule, 47 C.F.R. § 24.720(l)(11)(ii), allows all small business applicants to exclude any affiliates who would otherwise qualify as entrepreneurs by having gross revenues of less than $125 million and total assets of less than $500 million and whose total assets and gross revenues, when considered on a cumulative basis and aggregated with each other, do not exceed these amounts. This rule was affirmed by the D.C. Circuit Court of Appeals.88

29. We did not propose to eliminate the affiliation exception for Indian tribes and Alaska Regional or Village Corporations. We tentatively concluded that the "Indian Commerce Clause" of the United States Constitution provides an independent basis for this exception that is not implicated by the holding in Adarand.89

30. Comments. Point urges us not to adopt the modified minority investors exception that we adopted for the C block, stating that this exception merely gave opportunities to large companies.90 Similarly, DCR asserts that the exception is inconsistent with the goals of special provisions for small businesses because it permits control group members to be affiliated with large businesses, raising questions of control.91 DCR contends that while C block licensees that relied on the exception should not be excluded from the F block, the exception should not be extended to new applicants.92

31. Sprint, on the other hand, asserts that all small business applicants should be allowed to exclude from attribution the assets of affiliates that would themselves qualify as entrepreneurs.93 PCSD, Vanguard, NatTel, Conestoga, NCMC, RTC, PCIA, and WPCS also support adoption of the same change that we made for the C block.94 Antigone asserts that the Commission should extend the C block affiliation rules to the D, E, and F blocks and that it should limit its inquiry with respect to entities not under common control to whether together

88 Omnipooint, 78 F.3d at 631.

89 Notice at ¶ 39. See also Order on Reconsideration, 9 FCC Rcd 4493 (1994); Competitive Bidding Fifth Memorandum Opinion and Order, 10 FCC Rcd at 427.

90 Point Comments at 2-3.

91 DCR Comments at 5-6.

92 DCR Comments at 6.

93 Sprint Comments at 3.

94 PCSD Comments at 5-6; Vanguard Comments at 3; NatTel Comments at 3; Conestoga Comments at 3; NCMC Comments at 9; Roseville Telephone Company Comments at 4-5 ("RTC"); PCIA Comments at 10; WPCS Comments at 4. See also Radiofone Reply Comments at 22.
they own cognizable interests in CMRS.\textsuperscript{95} According to TEC, the FCC should not allow any investment in bidders by individuals or entities that do not individually and in the aggregate qualify as small businesses.\textsuperscript{96}

32. CIRI and WPCS support our tentative conclusion that the "Indian Commerce Clause" of the United States Constitution provides an independent basis for the affiliation exception for Indian tribes and Alaska Regional or Village Corporations that is not affected by the Supreme Court's holding in \textit{Adarand}.\textsuperscript{97} PCIA also supports retention of this exception.\textsuperscript{98}

33. \textbf{Decision.} We will eliminate the exception to our affiliation rules pertaining to minority investors for purposes of the F block auction. We believe that to retain this exception in its present state poses legal risks that, as discussed above, could delay the award of F block licenses. Furthermore, we decline to adopt the modification that we utilized for the C block, which enabled small business applicants to be affiliated with larger entrepreneur-size entities without jeopardizing their eligibility.

34. We adopted the modified exception for the C block in order to allow small businesses to pool their resources in a capital intensive service.\textsuperscript{99} We stated that we believed that these firms face barriers to raising capital not faced by larger firms and that small businesses experienced in managing smaller businesses should not be penalized because they own or are otherwise affiliated with other businesses whose assets and revenues must be considered on a cumulative basis and aggregated for purposes of qualifying for the C block.\textsuperscript{100} We observe also that the rule modification for the C block was adopted at a time when a number of minority-owned applicants had relied on the rule and had structured their business arrangements accordingly.\textsuperscript{101} The D.C. Circuit found our modification of this rule to accommodate these applicants to be appropriate under the circumstances.\textsuperscript{102} Commenters, however, have criticized this exception as contrary to our purpose of offering opportunities to small businesses because it opened the door to somewhat larger entities being able to participate as small businesses in the C block auction.

\textsuperscript{95} Antigone Comments at 7.

\textsuperscript{96} TEC Comments at 8-10.

\textsuperscript{97} CIRI Comments at 12; WPCS Comments at 2.

\textsuperscript{98} PCIA Comments at 10.

\textsuperscript{99} \textit{Competitive Bidding Sixth Report and Order}, 11 FCC Rcd at 154-55.

\textsuperscript{100} \textit{Id}.

\textsuperscript{101} See \textit{Id}.

\textsuperscript{102} \textit{Omnipoint}, 78 F.3d at 631.
35. Upon further consideration, we are not convinced that the C block exception is needed under current circumstances, and we acknowledge the argument that the exception may qualify too many larger entities as small businesses. We believe the smaller 10 MHz F block licenses, in particular, will be attractive to smaller entities. In that regard, we believe that declining to adopt the C block exception for the F block advances opportunities for smaller firms that may be well suited to compete for 10 MHz broadband PCS licenses. As discussed below, we will offer “tiered” bidding credits to benefit varying sizes of small businesses planning to participate in the F block auction. For applicants that participated in the C block auction and relied on our affiliation exceptions in structuring themselves, we will consider requests to waive our rules to allow them to be eligible to participate in the F block auction. Finally, we will retain the exception to our affiliation rules for Indian tribes and Alaska Regional or Village Corporations.

3. Installment Payments

36. Background. Our existing F block rules provide for five different installment payment plans. The first plan, available to entities with gross revenues in excess of $75 million, allows them to pay interest based on the ten-year U.S. Treasury rate plus 3.5 percent, with payment of principal and interest amortized over the term of the license. The second plan, available to entities with gross revenues between $40 and $75 million, provides for interest-only payments for one year, with the principal and interest equal to the ten-year U.S. Treasury rate plus 2.5 percent amortized over the remaining nine years of the license term. The third plan, available only to entities that qualify as a small business or consortium of small businesses, provides for the payment of interest at the ten-year U.S. Treasury rate plus 2.5 percent, but allows eligible entities to make interest-only payments for two years, with principal and interest amortized over the remaining eight years of the license term. The fourth plan, available only to businesses owned by members of minority groups or women, provides for interest-only payments for three years and payments of principal and interest over the remaining seven years of the license term. The final and most favorable plan, available only to small businesses owned by members of minority groups or women, provides for interest-only payments for six years and payments of principal and interest amortized over the remaining four years of the license term.

37. We proposed in the Notice to eliminate the special provisions based on an applicant's

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103 C.F.R. § 24.716.

104 C.F.R. § 24.716(b)(1).

105 C.F.R. § 24.716(b)(2).

106 C.F.R. § 24.716(b)(3).


status as a minority- or women-owned business in the event we found that the record was insufficient to sustain such provisions. We sought comment on whether we should provide for three installment payment plans based solely on financial size, as we did for the C block. We also requested comment on whether it is necessary to extend the most favorable C block payment terms to F block auction winners and, in particular, whether the six-year interest-only period serves the public interest, given that the amounts bid for the 10 MHz licenses most likely will be lower than those bid for 30 MHz licenses in the C block auction.\(^{109}\)

38. **Comments.** The majority of commenters support the adoption of three installment payment plans as discussed in the Notice.\(^{110}\) TDS advocates extending installment payments to rural telephone companies also.\(^{111}\) PCSD, which qualified as a minority- and woman-owned small business in the regional narrowband PCS auction and won five licenses, states that it found in that auction that, between bidding credits and installment payments, only installment payments provided a financial benefit. According to PCSD, this was the case because the prices paid for licenses with bidding credits in the regional narrowband PCS auction were equal to or higher than the prices companies paid for equivalent licenses without the credits.\(^{112}\) PCSD believes that entities acquiring F block licenses will need a reduced payment schedule, and that none of the installment payment periods should be modified.\(^{113}\) Arguing that many bidders have reasonably expected that the F block licenses would be available on terms similar to those of the C block licenses, and have made business plans based on this expectation, DCR believes that the six-year interest-only payment period used for the most favorable C block auction installment payment plan should also be employed for the most favorable F block plan.\(^{114}\) Airlink argues that a six-year deferral period is necessary for small businesses because most business plans show a six- to eight-year period before a PCS provider becomes cash flow positive.\(^{115}\) Antigone contends that the C block installment payment provisions should be extended to the D, E, and F blocks. Antigone argues, however, that the Commission should allow optional partial pre-payments in increments of $100,000.\(^{116}\)

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109 *See Notice* at ¶ 55.

110 Sprint Comments at 3; Conestoga Comments at 3; NCMC Comments at 10; Vanguard Comments at 3; Devon Comments at 8; Mid-Plains Comments at 2-3; PCS One, Inc. Comments at 1-2 (*"PCS One"); PCA Comments at 13-14; WPCS Comments at 4; *see also* Leong Comments at 3 (recommending additional "very small business" category of licensees eligible for interest-only payments for eight years at 10-year T-note rate).

111 Telephone and Data Systems, Inc. Reply Comments at 4 (*"TDS").

112 PCSD Comments at 7.

113 *Id.*

114 DCR Comments at 8-9.

115 AirLink Reply Comments at 10.

116 Antigone Comments at 8.
39. PersonalConnect, a beneficiary of the installment plan rules as a C block designated entity, believes that our current installment payment rules encourage undesirable speculation and risk-taking since only 10 percent of the winning bid is paid -- as a down payment -- in the first six years under the most favorable plan. PersonalConnect suggests that shortening the period for interest-only payments to four years, in conjunction with increasing the down payment requirement to 25 percent, would dampen speculation while still providing opportunities for designated entities to win licenses. AT&T argues that the Commission should eliminate the small business provisions from the F block rules, but if such provisions are retained a simplified installment payment plan with a shorter interest-only period should be adopted.

40. Decision. Based on our review of the record, we amend our F block rules concerning installment payments as set forth in the Notice. Thus, all small businesses, including those owned by minorities and women, will be eligible for the most favorable installment plan. We conclude that extending this installment payment plan to all small businesses will give minority- and women-owned businesses an opportunity to participate in the provision of spectrum-based services. Moreover, this leveling up approach was upheld by the D.C. Circuit Court of Appeals for the C block auction.

41. We also conclude, however, that we should amend our rules to shorten the period during which F block auction winners eligible for this plan may make interest-only payments. For the reasons discussed below, the most favorable plan will have a two-year interest-only payment period, rather than a six-year interest-only period. The plan will provide for installments at a rate equal to ten-year U.S. Treasury obligations applicable on the date the license is granted, with payments of principal and interest amortized over the remaining eight years of the license term. Principal will be repaid as part of equal quarterly payments of interest and principal (as with a standard mortgage amortization schedule).

42. Entrepreneurs that are not small businesses will be eligible for installment payments as provided in Sections 24.716(b)(1) and 24.716(b)(2) of our rules. These rules provide for installments at a rate equal to ten-year U.S. Treasury obligations applicable on the date the license is granted plus 3.5 percent, with payments of principal and interest amortized over the license term for eligible licensees with gross revenues exceeding $75 million in each of the two preceding years. Eligible licensees with gross revenues not exceeding $75 million in each of the two preceding years may make installment payments at a rate equal to ten-year U.S. Treasury obligations.

117 PersonalConnect Communications, L.L.C. Comments at 3 ("PersonalConnect").

118 Id. *But see* Advanced Comments at 2 (advocating interest-only payments for eight or nine years to entities in "targeted" areas with high unemployment and crime).

119 AT&T Comments at 5-6; AT&T Reply Comments at 4.

120 *Omnipoint*, 78 F.3d at 633-34.
obligations applicable on the date the license is granted plus 2.5 percent, with interest-only payments for the first year and payments of interest and principal amortized over the remaining nine years of the license term.

43. We believe that a two-year interest-only period with an interest rate equal to the ten-year U.S. Treasury rate and principal amortized over the remaining eight years of the license term provides small businesses with the appropriate level of U.S. government assisted financing to overcome the difficulties faced in accessing capital to compete in the PCS marketplace. We agree with PersonalConnect's argument that reducing the interest-only period will dampen speculation while still providing small businesses with the ability to obtain the necessary funds for construction and initial operation of their systems. However, we believe a two-year interest-only period more effectively achieves these objectives than the four-year period suggested by PersonalConnect.

44. Specifically, the two-year interest-only period in the most favorable installment payment plan for the F block will allow small businesses two full years during which they can devote resources to business development and infrastructure costs rather than license costs. Upon completion of these two years of interest-only payments, licensees should be capable of beginning to make principal payments. We believe that an interest-only period longer than two years is not necessary to help small businesses compete in the PCS marketplace, especially with 10 MHz licenses. We initially established tiered installment payment plans that provided a two-year interest-only period for small businesses and a five-year interest-only period for small businesses owned by minorities and/or women in order to allow these entities to concentrate their resources on infrastructure build-out. We subsequently extended the interest-only period for small businesses owned by women and/or minorities to six years from the date of license grant because under the five year benchmark, principal payments would come due at the same time the designated entity was permitted to transfer the license and immediately following the first build-out requirement. By deferring payment of principal an additional year, we intended to assist the designated entity in avoiding an unwanted sale in order to avoid payment of principal. In light of Adarand, we later extended the six-year interest-only provisions to all small business C block licensees. The build-out requirements for 10 MHz licenses are more liberal than those for 30 MHz licenses, requiring only a one-fourth population coverage or showing of substantial service within the first five years, as compared to the one-third population coverage required of 30 MHz licenses. Given these less burdensome requirements, we believe that a two-year interest-only

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121 PersonalConnect Comments at 3.

122 Competitive Bidding Fifth Report and Order, 9 FCC Rcd at 5593.

123 Competitive Bidding Fifth Memorandum Opinion and Order, 10 FCC Rcd at 459-60.

124 Competitive Bidding Sixth Report and Order, 11 FCC Rcd at 158.

125 47 C.F.R. § 24.203.
period will provide sufficient assistance to F block licensees by giving them a substantial period to devote resources to constructing their systems, while also encouraging them to provide service to the public quickly.

45. We also believe that a two-year interest-only period (and other measures adopted herein) will deter speculation and insincere bidding. If licensees need to pay only a small percentage of their winning bid (10 percent for the C block and 20 percent for the F block) through year six of the license term, they will have a greater incentive to place speculative bids because the actual cost of the license is not recognized until late in the license term. We believe that shortening the interest-only period to two years will be likely to encourage bidding, business, and financial strategies based upon market forces rather than the financial terms of installment payment plans.

46. Finally, shortening the interest-only period to two years will not foreclose opportunities for small businesses to compete in PCS. The terms that the Commission is offering (two years interest-only, interest equal to the ten-year U.S. Treasury obligation, and financing on 80 percent of the license price) are extremely attractive compared to other terms small businesses may be able to obtain. This financing will result in significant capital cost savings and financial assistance to small businesses -- our original intent in offering installment financing.\textsuperscript{126} Helping small businesses overcome the most significant hurdle to competition in the communications marketplace -- access to capital -- is a top priority of the Commission.\textsuperscript{127} We believe the steps we have taken here further this objective. We note also that a two year interest-only period is consistent with terms we have offered in other auctions, notably MDS and 900 MHz SMR.\textsuperscript{128}

47. We also conclude that we should amend the terms of our installment payments to provide for late payment fees. Therefore, when licensees are more than fifteen days late in their scheduled installment payments, we will charge a late payment fee equal to 5 percent of the amount of the past due payment. For example, if a $50,000 payment is due on June 1, then on June 16 $2,500 is due in addition to the payment. Without this late payment fee, licensees may not have adequate financial incentives to make installment payments on time. Licensees may therefore attempt to maximize their cash flow at the government's expense by paying late. The 5 percent payment we adopt here is an approximation of late payment fees applied in typical commercial lending transactions. Payments will be applied in the following order: late charges, interest charges, principal payments.

4. Bidding Credits

\textsuperscript{126} Implementation of Section 309(j) - Competitive Bidding, \textit{Second Report and Order}, PP Docket 93-253, 9 FCC Rcd 2348, 2389 (1994) ("\textit{Competitive Bidding Second Report and Order}").

\textsuperscript{127} See, e.g., \textit{Competitive Bidding Fifth Report and Order}, 9 FCC Rcd at 5584-85.

\textsuperscript{128} See 47 C.F.R. § 21.960(b)(3)(iii) and 47 C.F.R. § 90.812(a)(2).
48. **Background.** Under our F block rules a small business is granted a 10 percent bidding credit, a business that is owned by members of minority groups or women is granted a 15 percent bidding credit, and a small business owned by members of minority groups or women is allowed to aggregate these bidding credits for a 25 percent bidding credit. We proposed in the *Notice* to eliminate race- and gender-based bidding credits in our F block rules if we found that the record was insufficient to withstand judicial review. We also sought comment on whether we should extend a single bidding credit to all small businesses as we did for the C block and, if so, how big that credit should be. We asked whether, as an alternative, we should offer tiered bidding credits for small businesses of different sizes. We tentatively concluded that, because the value of 10 MHz licenses may be lower than the value of 30 MHz licenses, a smaller bidding credit than we offered C block bidders may be appropriate for F block bidders. We also tentatively concluded that these lower expected values may attract smaller businesses, thus justifying a tiered bidding credit.

49. **Comments.** AirLink, the NY Coalition, Sprint, Conestoga, DCR, NatTel, Mid-Plains, PCS One, Western, and WPCS assert that the bidding credit used in the C block auction -- a 25 percent bidding credit for all small businesses -- should also be used in the F block auction. DCR argues that many bidders have reasonably expected that the F block licenses would be available on terms similar to those of the C block licenses and have made business plans based on this expectation. PersonalConnect claims that the 25 percent bidding credit, as opposed to installment payments, is the essential feature which will allow designated entities to attract investors.

50. NCMC, on the other hand, encourages the Commission to adopt a two-tiered bidding credit plan for small businesses participating in the F block auction, asserting that tiered bidding credits will advance Congress' goals of avoiding concentration of licenses and promoting the dissemination of licenses to a broad variety of applicants. NCMC supports a 25 percent bidding credit for small businesses that have aggregate gross revenues under $15 million and a 15 percent

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130 47 C.F.R. § 24.717(b).

131 47 C.F.R. § 24.717(c).

132 *Notice* at ¶ 47.

133 AirLink Comments at 14; NY Coalition Comments at 5; Sprint Comments at 3; Conestoga Comments at 3; DCR Comments at 8; NatTel Comments at 3-4; Mid-Plains Comments at 3; PCS One Comments at 1; Western Comments at 30; WPCS Comments at 4. *See also* Ondas Comments at 2 (arguing in favor of a 40 percent bidding credit).

134 DCR Comments at 8-9.

135 PersonalConnect Comments at 3.

136 NCMC Comments at 11.
bidding credit for small businesses with gross revenues between $15 million and $40 million.\textsuperscript{137} PCIA also supports tiered bidding credits of 10, 15, and 25 percent, depending on the size of the small business.\textsuperscript{138} ICGC and ONE suggest a tiered definition of small business such that firms with average annual gross sales of less than $5 million would receive a 40 percent bidding credit and firms with average annual gross sales of less than $11 million would receive a 25 percent bidding credit.\textsuperscript{139} Mr. Harvey Leong asserts that businesses with less than $1 million in both revenues and assets should receive a 50 percent bidding credit.\textsuperscript{140} Finally, Advanced argues that entities located in "targeted" areas, such as high unemployment or high crime areas, should receive a 25 percent bidding credit, while entities outside these areas should receive a 10 percent bidding credit.\textsuperscript{141}

51. Devon urges the Commission to eliminate bidding credits and the related unjust enrichment provisions from the F block rules, asserting that the C block auction illustrates that they may discourage future participation of designated entities.\textsuperscript{142} Devon contends that bidders with bidding credits have generally been forced to pay a premium gross price for PCS licenses, while the net price has been roughly equivalent to the market price, thereby eviscerating any discounting impact on the license values.\textsuperscript{143} Devon further contends that the unjust enrichment provisions penalize designated entities by requiring the recapture of the bidding credit even when no enrichment has occurred.\textsuperscript{144} Devon argues that within the entrepreneurs' block the installment payment plans provide adequate assurance that small businesses will be successful in obtaining licenses.\textsuperscript{145}

52. Decision. Consistent with our concerns about avoiding litigation based on\textit{Adarand}, we will eliminate the race- and gender-based aspects of our F block bidding credits. In place of these provisions, we adopt a two-tiered bidding credit for small businesses, as proposed by NCMC. We agree with NCMC that a two-tiered approach will promote dissemination of licenses to a broader variety of applicants than a 25 percent bidding credit for all small businesses, the

\textsuperscript{137} Id.
\textsuperscript{138} PCIA Comments at 13.
\textsuperscript{139} Integrated Communications Group Corp. Comments at 2 ("ICGC"); Opportunities Now Enterprises Inc. Comments at 1-3 ("ONE").
\textsuperscript{140} Leong Comments at 3.
\textsuperscript{141} Advanced Comments at 2.
\textsuperscript{142} Devon Comments at 4.
\textsuperscript{143} Id.
\textsuperscript{144} Id. at 4-5.
\textsuperscript{145} Id. at 5.
approach we took for the C block. We believe that this tiered approach will encourage smaller businesses, possibly businesses that are very well suited to provide 10 MHz niche services, to participate in the F block auction. We also believe, in response to Devon's arguments, that a tiered approach enhances the discounting effect of bidding credits because not all entities receive the same benefit. We note that our original F block rules included bidding credits that were tiered -- although based on race and gender. We have also offered tiered bidding credits for small businesses in auctioning other services. In auctioning 900 MHz SMR licenses, for example, we provided a 15 percent bidding credit to very small businesses with average annual gross revenues of not more than $3 million and a 10 percent bidding credit to small businesses with average annual gross revenues of not more than $15 million.\footnote{Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the SMR Pool, Second Order on Reconsideration and Seventh Report and Order, 11 FCC Rcd 2639, at 2705-6 (1995) ("Competitive Bidding Seventh Report and Order").}

53. We find that NCMC’s specific proposal strikes a good balance between offering added incentives to very small businesses and retaining some bidding credits for entities that received them in the C block. Under the modified rule, entities with average gross revenues of not more than $15 million for the past three years are eligible for a 25 percent bidding credit. Entities with average gross revenues of not more than $40 million for the past three years are eligible for a 15 percent bidding credit.

54. We also believe that the timing of our modification here, as compared to the modifications that we made in the Competitive Bidding Sixth Report and Order allows us to take a different approach than we took for the C block. When we modified our rules for the C block, we attempted to preserve the expectations and business strategies of applicants who had relied on their eligibility for a 25 percent bidding credit. The single 25 percent small business bidding credit adopted for the C block ensured that all prospective applicants were able to participate in the auction.\footnote{See Competitive Bidding Sixth Report and Order, 11 FCC Rcd at 161.} Entities interested in bidding on F block licenses have not had similar expectations in structuring their businesses or formulating strategies in reliance on the tiered bidding credits originally adopted.

5. Information Collection

55. In the Notice, we asked for comment on our proposal to continue to request that applicants provide information regarding minority- and women-owned status in their short-form applications if we eliminated the race- and gender-based provisions in our F block rules.\footnote{Notice at ¶ 48.} All the comments that we received on this issue favored our proposal.\footnote{Antigone Comments at 9; DCR Comments at 4; NatTel Comments at 4, n.3.} Thus, we will continue to
request information regarding minority- and women-owned status in the F block short-form applications. As we stated in the Notice, we believe that continuing to collect such information will assist us in analyzing applicant pools and auction results to determine whether we have promoted substantial participation in auctions by minorities and women, as we are directed by Congress, through the special provisions we make available to small businesses. This information will also assist us in preparing our report to Congress on the participation of designated entities in the auctions and in the provision of spectrum-based services. We also believe that such information will be relevant in developing a supplemental record should we find that special provisions for small businesses prove unsuccessful in encouraging the dissemination of licenses to a wide variety of applicants, including businesses owned by members of minority groups and women.

B. Definitions

1. Small Business

56. Background. Under our current F block rules, a "small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such entity and their affiliates, has average gross revenues of not more than $40 million for the preceding three years. In the Notice, we proposed to keep this definition for the F block, which is also used for the C block, to allow C block small business licensees to benefit from the small business provisions of the F block. However, we expressed concern that this threshold might prevent C block winners from acquiring F block licenses because of the value of their C block licenses, and we requested comment on whether the value of a C block license should be part of the gross revenues calculation. We also requested comment on whether we should define and adopt rules for very small businesses, and whether we should modify or simplify the affiliation rules.

57. Comments. Most commenters support our proposal to continue to define entities with $40 million or less in gross revenues as small businesses. Commenters advocating a
change in our definition support using both lower financial tests\textsuperscript{154} and higher financial tests\textsuperscript{155} or looking at net worth and total assets rather than gross revenues.\textsuperscript{156} RAA proposes that any bidder intending to serve more than 5 million pops should not be considered a small business.\textsuperscript{157} Other commenters support changes to the affiliation rules. CSCI advocates modifying the definition of publicly traded companies with widely dispersed voting power to eliminate the 15 percent single entity ownership limitation.\textsuperscript{158} In other words, it requests that we allow publicly held companies in which a single person owns more than 15 percent of the equity to ignore its affiliates' and owners' revenues and assets for purposes of qualifying as a small business or entrepreneur. BellSouth supports redefining small businesses to promote the participation of very small businesses in spectrum-based services.\textsuperscript{159}

58. The comments are equally split on the issue of whether the value of licenses won in the C block auction should be considered in determining whether an entity is a small business. Arguments in opposition to considering the value of C block licenses include the assertion that the value of these licenses is offset by the liability of payments to the U.S. Treasury,\textsuperscript{160} that C block licensees plan to aggregate C and F block spectrum,\textsuperscript{161} that C block bidders' ineligibility to bid in the F block auction would unfairly limit them to acquiring 10 MHz licenses in the secondary market;\textsuperscript{162} and that we intended for entities qualifying as entrepreneurs or small businesses to continue to qualify regardless of financial growth.\textsuperscript{163} Arguments in favor of considering the value of C block licenses include: expanding the number of broadband licensees; improving opportunities for bidders that were unable to win licenses in previous broadband PCS auctions;

\begin{itemize}
  \item Point Comments at 2; Bray Comments at 2; New Dakota Investment Trust Comments at 6-7 ("New Dakota"); ICGC Comments at 2; ONE Comments at 1; Thompson PCS Systems, Inc. Comments at 3 ("TPCS"); Wireless 2000, Inc. Comments at 1 ("Wireless 2000"); Wireless Interactive Data Systems Comments at 1 ("WIDS"); Advanced Comments at 1; Ondas Comments at 2; Columbia Comments at 1.
  \item Vanguard Comments at 4-5 (proposing raising small business eligibility threshold to $350 million in average revenues and $700 million in total assets because of the capital-intensive nature of building a communications business).
  \item Mountain Solutions Comments at 9; TEC Comments at 5-8. TEC also argues, in the alternative, that we should prohibit attributable investment and significant loans by entities with a net worth over $30 million and total assets above $300 million averaged over the last three years. \textit{Id.} at 8.
  \item Rendall and Associates Reply Comments at 2-3 ("RAA").
  \item Community Service Communications, Inc. Comments at 6-8 ("CSCI"). \textit{See} 47 C.F.R. § 24.720(m).
  \item BellSouth Comments at 12.
  \item Auction Strategy Comments at 2.
  \item Alliance Comments at 4; NextWave Comments at 5; Western Comments at 28 and Reply Comments at 17-18.
  \item Devon Comments at 11.
  \item DCR Comments at 6-7; NextWave Comments at 4-5; Omnipoint Corp. Comments at 5 ("Omnipoint"); Western Comments at 28. \textit{See also} Bear Sterns Reply Comments at 5.
\end{itemize}
and increasing opportunities for small businesses, including those owned by women and minorities.\textsuperscript{164}

59. **Decision.** We will continue to define small businesses as those entities that have gross revenues of not more than $40 million. Maintaining our $40 million definition of small businesses avoids disruption to the business plans of potential bidders, particularly participants in the C block auction. Additionally, however, we define a second tier of small businesses, which we will refer to as "very small businesses," as entities that, together with their affiliates and persons or entities that hold interests in such entities and their affiliates, have average gross revenues of not more than $15 million for the preceding three years. Creation of this subcategory of small businesses enables us to tailor our benefits to better meet the needs of bidders likely to participate in the F block auction. Smaller license size may mean that smaller businesses are likely to participate in the F block auction. Thus, as discussed above, our goals can best be served by offering varying bidding credits depending on the applicant's size. We believe that BellSouth's concern about furthering the interests of very small businesses is addressed in the tiered bidding credits that we adopt herein.\textsuperscript{165} We will not, however, redefine publicly traded companies with widely dispersed voting power to eliminate the 15 percent single entity ownership limitation as requested by CSCI. Applicants such as CSCI that believe that their individual ownership structures merit exemption from our general definition may request a waiver.

60. We decline to make special provisions for small business winners of C block licenses as requested by some commenters.\textsuperscript{166} As a practical matter, C block small business winners will likely not have accrued substantial gross revenues by the time we auction the D, E, and F blocks. Therefore, most of these winners should continue to qualify as small businesses. On the other hand, if they have grown in size beyond our established financial cap, or, if they can no longer avail themselves of our exception to the affiliation rules,\textsuperscript{167} they may no longer qualify as a small business.

2. **Rural Telephone Company**

61. **Background.** In the *Notice*, we sought comment on whether we should retain the current definition of rural telephone company or replace it with the definition contained in the

\textsuperscript{164} CIRI Comments at 8-11 (suggesting that any C block licensee that holds BTA licenses covering more than two percent of the national population should be ineligible for any small business preferences). See also Iowa Comments at 6; NatTel Comments at 4; NCMC Comments at 11-12; Radiofone Reply Comments at 23; AirLink Reply Comments at 13 (stating that the Commission excluded reasonable business growth of a licensee for purposes of transactions outside the auction context, but has never done so for purposes of determining initial eligibility to participate in an auction).

\textsuperscript{165} See supra ¶ 53.

\textsuperscript{166} See, e.g., DCR Comments at 7 (C block winners applying for the F block should not be required to submit new statements of gross revenues and updated total assets, unless there has been a change in affiliation or attributable investors).

\textsuperscript{167} See supra ¶ 34.
1996 Act. In adopting this definition and geographic partitioning provisions, we indicated that it would facilitate the rapid deployment of broadband PCS to rural areas without giving benefits to large companies that do not require special assistance. The 1996 Act, which defines 'rural telephone company' to include a larger number of local exchange carriers, provides:

Rural telephone company.--The term 'rural telephone company' means a local exchange carrier operating entity to the extent that such entity--
(A) provides common carrier service to any local exchange carrier study area that does not include either--
   (i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or
   (ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;
(B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;
(C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or
(D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

62. Comments. Commenters are divided over whether the Commission should continue to use the definition of rural telephone company adopted in the Competitive Bidding Fifth Report and Order or the new definition contained in the 1996 Act. The PCS Coalition, the NY Coalition, USIW, the Alliance, and NTCA urge the Commission to retain its current definition. They contend that replacing the current definition with the 1996 Act's definition would extend benefits intended for smaller companies to larger carriers, undermining the goals of Section 309(j)(3)(B) and possibly enabling larger LECs to attempt to qualify as rural telephone companies. They also argue that the definition contained in the 1996 Act does not expressly

168 Notice at ¶ 52.

169 Competitive Bidding Fifth Report and Order, 9 FCC Rcd at 5617; 47 C.F.R. § 24.720(e).

170 Competitive Bidding Fifth Report and Order, 9 FCC Rcd at 5617.


172 PCS Coalition Comments at 11-14; NY Coalition Comments at 6-7; USIW Comments at 6; Alliance Comments at 5-6; and NTCA Comments at 5.

173 PCS Coalition Comments at 11-12; NY Coalition Comments at 9; and NTCA Comments at 5.
override or replace any definitions that currently exist and that are outside the scope of the Act. Finally, they claim that many rural telephone companies have reasonably relied upon the current definition and have made their plans and formed their coalitions in reliance on this definition.

63. On the other hand, a number of commenters urge the Commission to amend its current definition of rural telephone company to conform with the definition contained in the 1996 Act. Auction Strategy claims that the definition should be changed to promote conformity and ease of regulation. GTE, Mid-Plains, TDS, and ALLTEL argue that the Commission should adopt the definition contained in the 1996 Act because it would increase the number of entities eligible for partitioning, which would help bring advanced service to rural areas more swiftly and increase the value of PCS licenses by increasing the number of entities qualified to acquire at least a portion of a license. ALLTEL, Mid-Plains, and TDS also contend that the 1996 Act's definition of rural telephone company is a definition of general applicability, indicating that Congress intended for it to apply to the entire Communications Act.

64. RTC, while opposing adoption of the new statutory definition for the F block auction, proposes expanding the current definition of rural telephone company to all LECs with less than 120,000 access lines (including all affiliates). Alternatively, if the Commission adopts the definition contained in the 1996 Act, RTC contends that newly enacted Section 251(f)(2) creates a de facto definition of rural telephone company limited to LECs "with fewer than 2 percent of the Nation's subscriber lines." Accordingly, LECs that serve fewer than 2 percent of the nation's subscriber lines, RTC proposes, should qualify as rural telephone companies for purposes of the Commission's PCS rules.

65. Decision. We agree with those commenters that support the Commission's use of the definition of rural telephone company contained in the 1996 Act. We find compelling the arguments of GTE and ALLTEL that this definition will increase the number of entities eligible
for partitioning and expedite the delivery of advanced services to rural areas. Although this decision may result in larger rural telephone companies being eligible to partition licenses, we recognize that the number of access lines - including those provided by rural telephone companies - continues to grow rapidly as the uses of telecommunications services expand. Thus, most rural telephone companies will benefit from a definition that accounts for their growth. Indeed, as RTC points out, we previously increased the threshold number of access lines from 50,000 to 100,000 in order to reflect this growth, consistent with the purposes of Section 309(j)(3)(A).\(^{182}\) We also believe that adopting the 1996 Act definition for purposes of Section 309(j) will promote uniformity of regulations and is therefore consistent with the mandate of this legislation of easing regulatory burdens and eliminating unnecessary regulation. We believe that it is also consistent with our proposal to expand the availability of partitioned licenses generally.\(^{183}\)

66. We agree with commenters who assert that the definition is one of general applicability. We therefore elect not to adopt RTC’s proposed definition contained in Section 251(f)(2) of the 1996 Act. This definition applies to rural telephone companies only in the context of suspensions or modifications of the application of certain statutory requirements to rural carriers. Absent a specific definition of rural telephone company for purposes of Section 309(j), and reading the statute as a whole, we are constrained to adopt the more generalized definition.

C. Extending Small Business Provisions to the D and E Blocks

67. Background. We requested comment in the Notice on whether we should extend installment payment plans to small businesses bidding on the D and E blocks. We tentatively concluded that extending installment payments to the D and E blocks could increase the chances for all small businesses, including those that are women- and minority-owned, to win a D, E, or F block license and that it could increase opportunities for small businesses that are current PCS, cellular, or SMR licensees to obtain 10 MHz licenses that they could aggregate with their current licenses.\(^{184}\)

68. Comments. A majority of commenters advocate extending installment payment plans to small businesses in the D and E blocks.\(^{185}\) AirLink, for example, asserts that installment

\(^{182}\) Id.

\(^{183}\) See supra note 55.

\(^{184}\) Notice at ¶ 54.

\(^{185}\) PCS Coalition Comments at 9; AirLink Comments at 12; Antigone Comments at 8; Point Comments at 3; Auction Strategy Comments at 2; Alliance Comments at 6; Phoenix Comments at 3; PersonalConnect Comments at 2; Radiofone Comments at 11; CIRI Comments at 3 & Reply Comments at 9; DCR Comments at 10; Devon Comments at 12; Gulfstream Comments at 3-4; NatTel Comments 4-5; NCMC Comments at 12; Omnipro Payments Comments at 2; TEC Comments at 12; ICGC Comments at 1; ONE Comments at 1; Mid-Plains Comments at 4; PCS One Comments at 1; RAA Reply Comments at 3; NTCA Reply Comments at 3; Columbia Comments at 1; Western Reply Comments at 19. See also, Iowa Comments at 2, 5; KMTel, L.L.C. Comments at 5 ("KMTel"); Mountain Solutions Comments at 7-8 (if
payments are particularly important in the D and E blocks because all bidders will be eligible to participate regardless of size.\textsuperscript{186} Omnipoint states that extending small business provisions to the D and E blocks will give small businesses a greater opportunity to aggregate 10 MHz licenses.\textsuperscript{187} Many commenters also propose extending bidding credits to the D and E blocks.\textsuperscript{188}

69. Commenters opposing the extension of installment payment plans to the D and E blocks argue primarily that small businesses receive ample opportunity to acquire 10 MHz licenses in the F block and that the market should decide the most efficient use of the remaining spectrum.\textsuperscript{189} BellSouth argues that our spectrum allocation plan for broadband PCS, including the C and F block set-asides, satisfies Congressional intent regarding designated entities.\textsuperscript{190} GWI argues that bidders in the C block auction valued the licenses in that auction based, in part, on the belief that the C block would be the only opportunity to rely on small business provisions to acquire 30 MHz broadband PCS licenses.\textsuperscript{191} It believes that offering an installment payment plan to small businesses on D and E block licenses could decrease the value of C block licenses at a time when C block licensees will be attempting to secure financing for their buildout.\textsuperscript{192} Other arguments in opposition to extending installment payments to the D and E blocks are that this approach would frustrate bidders' expectations created by the existing rules;\textsuperscript{193} it calls into question the rationale for the entrepreneurs' block;\textsuperscript{194} instead of awarding licenses to the entities that value them the most, it could result in awarding licenses to entities that value the government's loans the most;\textsuperscript{195} and it has given C block winners a windfall that should not be

\textsuperscript{186} AirLink Comments at 12.

\textsuperscript{187} Omnipoint Comments at 3-4.

\textsuperscript{188} PCS Coalition Comments at 9; USIW Comments at 6-7; Alliance Comments at 7 (also proposes that these provisions be extended to rural telephone companies); Phoenix Comments at 3; PersonalConnect Comments at 2; Radiofone Comments at 11; CIRI Comments at 3-4; DCR Comments at 10; Gulfstream Comments at 3-4; KMTel Comments at 5; NatTel Comments 4-5; NCMC Comments at 12; Omnipoint Comments at 2; ICGC Comments at 1; ONE Comments at 1; Mountain Solutions Comments at 7 (on condition that D and E blocks are not set-asides); Wireless 2000 Comments at 2. \textit{See also} Iowa Comments at 2, 5.

\textsuperscript{189} Sprint Comments at 7; BellSouth Comments at 14; US West Comments at 2; TDS Comments at 8-9.

\textsuperscript{190} BellSouth Reply Comments at 6.

\textsuperscript{191} General Wireless, Inc. Comments at 3-4 ("GWI").

\textsuperscript{192} Id.

\textsuperscript{193} AT&T Comments at 6; GWI Comments at 2-3; TDS Reply Comments at 6.

\textsuperscript{194} BellSouth Comments at 14.

\textsuperscript{195} US West Comments at 2; \textit{see also} Allied Comments at 5 and AT&T Reply Comments at 4.
repeated in future auctions.\textsuperscript{196}

70. \textbf{Decision.} We decline to extend installment payment plans or any other special provisions to small businesses bidding on the D and E blocks. We believe that the special provisions for small businesses in the F block rules sufficiently further our objective of encouraging wide dissemination of broadband PCS licenses.\textsuperscript{197} We note that in the recently completed C block auction, almost 90 entrepreneurs and small businesses won 30 MHz broadband PCS licenses.\textsuperscript{198} Our F block rules will create additional opportunities for entrepreneurs and small businesses to acquire 10 MHz licenses. Further, since the F block is an entrepreneurs' block, it guarantees that one third of the 10 MHz broadband PCS licenses will be assigned to entrepreneurs and small businesses. Larger entities are prevented from acquiring F block licenses.

71. Commenters contend that we would undermine the justification for the F block as an entrepreneurs' block if we were to open the D and E blocks to special provisions for small businesses.\textsuperscript{199} We agree and believe that departing from our original plan to establish two contiguous blocks of broadband PCS spectrum for the exclusive use of entrepreneurs and small businesses is not warranted. We set aside one third of broadband PCS spectrum for small businesses and we believe this fulfills our obligation under Section 309(j). Many advocates of extending small business provisions to the D and E blocks argue that it will enhance competition for those licenses. We believe, however, that the auction of these two blocks will be very competitive, with participation by local exchange carriers, cellular carriers, PCS carriers, cable companies, public utilities, entrepreneurs and small businesses -- all of whom are eligible to bid for these licenses.

\section*{D. Adjusting Payment Provisions for 10 MHz Licenses}

72. \textbf{Background.} We recognized in the \textit{Notice} that winning bids for the D, E, and F block licenses, which authorize the use of 10 MHz, could be lower than those for the 30 MHz A, B, and C block licenses. Accordingly, we sought comment on whether we should adjust the terms of our installment financing provisions to reflect the expected lower values of the 10 MHz licenses. Similarly, we sought comment on whether our F block rules establishing discounted upfront payments and reduced down payments for entrepreneurs should be adjusted. Our rules currently require participants in the F block auction to submit an upfront payment of $.015 per MHz per

\textsuperscript{196} Western Comments at 30.

\textsuperscript{197} \textit{Competitive Bidding Fifth Memorandum Opinion and Order}, 10 FCC Rcd at 458.


\textsuperscript{199} \textit{See, e.g.}, AT&T Comments at 6; GWI Comments at 2-3; BellSouth Comments at 2; TDS Reply Comments at 6.
pop (or per bidding unit) for the maximum number of licenses (in terms of bidding units) on which
they intend to bid.\footnote{47 C.F.R. § 24.716(a)(1). The term "MHz-pops" is defined as the number of megahertz of the spectrum block multiplied by the population of the relevant service area. This measurement may also be referred to as "bidding units." The MHz-pops/bidding units measurement is used in the activity rules, stage transition rules, and bid increment rules.} Winning bidders in entrepreneurs' block auctions are required to supplement their upfront payment with a down payment sufficient to bring their total deposits up to 10 percent of their winning bid(s).\footnote{See Competitive Bidding Fifth Report and Order, 9 FCC Rcd at 5593. See also 47 C.F.R. § 24.711(a)(2) and 47 C.F.R. § 24.716(a)(2).} Under our current rules, a winning bidder in the F block auction would be required to submit five percent of its net winning bid within five days of the close of the auction, and the remainder within five days of the award of the license.\footnote{47 C.F.R § 24.716(a)(2).}

73. **Comments.** Some commenters took issue with our statement that winning bids for the D, E, and F blocks, because they are for 10 MHz licenses, could be lower than those for the 30 MHz A, B, and C blocks, generally arguing that license valuation is complex and subjective.\footnote{AirLink Comments at 13; Alliance Comments at 7; NatTel Comments at 3. See also PCIA Comments at 11-12.} For this reason, several commenters objected to adjusting the installment payment plans, upfront payments, or down payments.\footnote{See also PCIA Comments at 14.} In contrast, Conestoga asserted that upfront payments and down payments should be lowered to reflect the expected lower value of 10 MHz licenses.\footnote{Conestoga Comments at 3; see also Leong Comments at 3 (arguing that a 5 percent down payment should apply for very small businesses); WPCS Comments at 6.}

74. **NCMC believes that it is not necessary to increase the down payment and upfront payment requirement because the Commission has not seen significant bidder default outside of IVDS.**\footnote{NCMC Comments at 14; see also PCIA Comments at 14.} AirLink, on the other hand, supports increased upfront and down payments because they reduce the likelihood of bidder default.\footnote{AirLink Comments at 8-10. See also CIRI Reply Comments at 5; NextWave Reply Comments at 7.} Western advocates a substantially increased upfront payment and suggests $.20 per MHz-pop.\footnote{Western Comments at 31-32 n.29 and Reply Comments at 21.} AT&T also urges the Commission to increase the upfront payment amount for all three spectrum blocks to ensure the availability of adequate funds to cover default payments and suggests a $.10 per MHz-pop upfront payment.\footnote{AT&T Comments at 8; but see NTCA Reply Comments at 3.} AT&T further proposes that we require applicants to supplement their upfront payments during
the auction whenever their payment balances fall below a certain percentage of their bids.\textsuperscript{210} Go argues that bidders should be required to submit an upfront payment equal to 20 percent of the total amount bid during auction.\textsuperscript{211} To simplify cross-over bidding by small businesses in the D and E blocks, Auction Strategy believes that upfront payments should be the same for all blocks and bidder types.\textsuperscript{212} With respect to the down payment requirement, Sprint advocates a 20 percent requirement for F block winners;\textsuperscript{213} PersonalConnect suggests 25 percent;\textsuperscript{214} and CIRI suggests 30 percent.\textsuperscript{215}

75. \textbf{Decision.} We do not dispute commenters' contentions that it is difficult to predict how high bids will go for the 10 MHz licenses given the disparity between the prices paid for the A and B block licenses and the high bids for the C block licenses. Whether the ultimate D, E, and F block bids are higher or lower than those for the 30 MHz licenses, however, we conclude that our installment payment plans and our upfront payment and down payment requirements should be adjusted. These adjustments are based primarily on the fact that license values in the A, B, and C blocks have exceeded expectations. We are also concerned, based on BDPCS's default in the C block auction, that there is a need to obtain a higher payment up front to guard against default.\textsuperscript{216}

76. We therefore modify the upfront payment requirement for the F block to raise it to the same level as the D and E block requirement and eliminate the discount previously provided to entrepreneurs. We originally discounted upfront payments for entrepreneurs because their down payment requirement was low (5 percent) and we were concerned that if we required them to pay upfront payments larger than the required down payment we might discourage their participation.\textsuperscript{217} Our experience to date, however, indicates that we have underestimated the value of spectrum and that upfront payments have not created a barrier to entrepreneur participation in our auctions. We also agree with Auction Strategy that requiring a uniform upfront payment (per bidding unit) of all bidders for D, E, and F block licenses will greatly simplify the auction process for bidders interested in bidding on two or more of the blocks. We also believe that if we conduct a single simultaneous multiple round auction of the D, E, and F block licenses, it is necessary for operational reasons to have the same upfront payment and

\textsuperscript{210} AT&T Comments at 8; \textit{see also} Go Communications Corp. Comments at 3 ("Go"). \textit{But see} PersonalConnect Reply Comments at 3.

\textsuperscript{211} Go Comments at 1.

\textsuperscript{212} Auction Strategy Comments at 4.

\textsuperscript{213} Sprint Comments at 4.

\textsuperscript{214} PersonalConnect Comments at 3.

\textsuperscript{215} CIRI Comments at 7.

\textsuperscript{216} \textit{See} BDPCS Order; \textit{see also} NatTel Order.

\textsuperscript{217} \textit{Competitive Bidding Fifth Report and Order}, 9 FCC Rcd at 5600.
activity requirements across all three blocks.

77. Further, because we want our payment terms to more accurately reflect the value of the licenses, we will raise the upfront payment requirement for all three blocks. We believe that this action is consistent with our policy reason for requiring upfront payments -- to deter insincere and speculative bidding and to ensure that bidders have the financial capability to build out their systems. Our formula for calculating upfront payments was intended to approximate 5 percent of the estimated license value. Based on the license values established in the completed PCS auctions, however, the formula of $0.02 per MHz-pop underestimates actual value. We also agree with AT&T's argument that increased upfront payments will accomplish the objective of providing adequate funds to cover default payments. We note, for example, that in the cases of the BDPCS and NatTel's defaults, we have insufficient funds on hand to cover their default payments. AT&T suggests $.10 per MHz-pop as the upfront payment for the D, E, and F blocks. We choose, however, to adopt an upfront payment of $.06 per MHz-pop for the D, E, and F blocks. Based on our analysis of the prices paid in the C block auction, we believe that such an upfront payment is sufficient to ensure sincere bidding and guard against defaults. This upfront payment for the D, E, and F blocks equals approximately 5 percent of the market value of the C block licenses. We also delegate authority to the Wireless Telecommunications Bureau to modify the upfront payment requirement for any C block licenses that are reauctioned in the future. We note that we also favor the approach suggested by AT&T that would require applicants to supplement their upfront payments during the auction to ensure that their payment is a certain percentage of their bids. Operationally we cannot implement this proposal at this time, but we will look for ways to implement it in future auctions.

78. For similar reasons, we also modify our rule governing down payments for the F block. We find that a 20 percent down payment, the same down payment that is required of D and E block auction winners, should be required of F block winners. Under this approach, F block entrepreneurs and small businesses will be required to supplement their upfront payments to bring their total payment to 10 percent of their winning bid within 5 business days of the close of the auction. Prior to licensing, they will be required to pay an additional 10 percent. The government will then finance the remaining 80 percent of the purchase price. We believe an

218 Competitive Bidding Second Report and Order, 9 FCC Rcd at 2379.

219 See Id.

220 BDPCS paid an upfront payment of $7 million. NatTel paid an upfront payment of $50,000. Under 47 C.F.R. § 1.2104(g)(2) their default payment is the difference between the amount that they bid and the amount of the winning bid the next time the license is offered for auction, plus 3 percent of the subsequent winning bid. If the subsequent winning bid exceeds their defaulting bids, the 3 percent payment will be calculated based on their defaulting bid amount. Because their default payments cannot be determined yet, they are required to make a deposit of 20 percent of their defaulting bid. See Competitive Bidding Fifth Report and Order, 9 FCC Rcd at n. 51. Therefore, BDPCS is required to deposit $174,756,782.55 and NatTel is required to deposit $82,200.15.

221 We note that increasing the upfront payments for the D, E, and F blocks provides an indirect benefit to small businesses because it will raise more funds for the Telecommunications Development Fund, which exists to assist small businesses through loans, investments, or other extensions of credit. 47 U.S.C. § 614.
increased down payment will provide us with strong assurance against default and sufficient funds to cover default payments in the unlikely event of default. Increasing the amount of the bidder's funds at risk in the event of default discourages insincere bidding and therefore increases the likelihood that licenses are awarded to parties who are best able to serve the public.

E. Rules Regarding the Holding of Licenses

79. Background. Current rules allow no transfers or assignments of entrepreneurs' block licenses in the first three years after licensing and permit transfers and assignments to entrepreneurs in years four and five with no restrictions after year five. In the Notice, we tentatively concluded that our current transfer restrictions for F block licensees may be too restrictive and we proposed to amend the holding requirement to let all F block licensees transfer their licenses within the first three years to an entity that qualifies as an entrepreneur.

80. Comments. Most commenters agree with our proposal to relax the transfer restrictions for F block licensees. For example, Devon argues in favor of this proposal because it believes that it will ensure that spectrum is being used efficiently and that the public is being adequately served. Several commenters suggest that we should expand our proposal to include C block licensees also. For example, GWI asserts that because the C block auction and the F block auction are designed to serve the same statutory objective of ensuring opportunities for small businesses, the Commission's proposed change should apply to both blocks. Bear Stearns advocates relaxing the transfer restriction to give potential lenders and investors more assurance that in case of financial distress, it will be possible to replace the original entrepreneur with another qualifying entrepreneur in advance of an actual default. Other alternatives to our proposed rule change offered by commenters include eliminating the three-year restriction completely; instituting a permanent requirement that licenses be transferred only to like...

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222 See Sprint Comments at 4 (a higher down payment requirement "could serve as a valuable reality check"); PersonalConnect Comments at 3 (increasing down payment "would dampen . . . speculation").

223 47 C.F.R. § 24.839.

224 Notice at ¶ 62.

225 Cellular Telecommunications Industry Association Comments at 3 ("CTIA"); Alliance Comments at 8; DCR Comments at 12; Devon Comments at 14; GWI Comments at 6-7; NatTel Comments at 5; NCMC Comments at 14; Wireless 2000 Comments at 2; WIDS Comments at 1; WPCS Comments at 7; PCIA Comments at 14.

226 Devon Comments at 14

227 US West Comments at 8; GWI Comments at 7-8; PersonalConnect Comments at 4; Bear Stearns & Co., Inc. Reply Comments at 2 ("Bear Stearns").

228 GWI Comments at 7-8.

229 Auction Strategy Comments at 3; PCIA Reply Comments at 5.
entities;\textsuperscript{230} and allowing transfers to small and very small businesses but not to entrepreneurs or other entities.\textsuperscript{231} Further, KMTel proposes that we eliminate the unjust enrichment provisions for the C block contained in Sections 24.711(e) and 24.712(d) of our rules because bidders have effectively "bid away" the discounts.\textsuperscript{232} Finally, DCR requests that we clarify that our transfer restriction does not apply to \textit{pro forma} transfers or assignments.\textsuperscript{233}

81. AirLink and Conestoga, on the other hand, oppose our proposal because they believe that it will fuel speculation and possibly collusion.\textsuperscript{234} Sprint argues in favor of the current rule because it believes that it is not too restrictive and that it should be kept consistent with the C block rule.\textsuperscript{235}

82. Decision. We will relax the holding requirement for the F block auction winners. Specifically, we will modify the rule to permit transfers and assignments of licenses to other entrepreneurs, including small businesses, in the first five years after license grant. We further agree with GWI and Bear Stearns that it is appropriate to make the same rule change for the C block. We believe that modifying the rule in this manner provides entrepreneurs' block winners with flexibility to engage in market transactions that do not undermine our stated objective of promoting a diverse and competitive PCS market.

83. Our holding rule was established to ensure that designated entities do not take advantage of special entrepreneurs' block provisions by immediately assigning or transferring control of their licenses to non-entrepreneurs. We indicated that trafficking of licenses in this manner would unjustly enrich the auction winners and would undermine the congressional objective of giving designated entities the opportunity to provide spectrum-based services.\textsuperscript{236} After considering the record in this proceeding, we conclude that allowing transfers and assignments in the first five years -- but only to entrepreneurs -- provides a sufficient safeguard to satisfy our concerns. A restriction on transfers and assignments for five years, rather than three years, ensures that an entrepreneur will hold and build out the license until the first construction benchmark. We also have the experience of the C block auction behind us, and understand that

\textsuperscript{230} TEC Comments at 9-10; Iowa Comments at 3; Mountain Solutions Comments at 4-5. \textit{See also} Antigone Comments at 9 (proposing that we amend the transfer restrictions for the C and F blocks to allow transfers at any time to women-controlled small businesses).

\textsuperscript{231} Columbia Comments at 2.

\textsuperscript{232} KMTel Comments at 6.

\textsuperscript{233} DCR Comments at 12. \textit{See also} PCS Mobile America, Inc., Request for Declaratory Ruling, May 8, 1996 (requesting a declaratory ruling concerning the application of Section 24.839 to \textit{pro forma} assignments of licenses).

\textsuperscript{234} AirLink Comments at 16; Conestoga Comments at 3-4.

\textsuperscript{235} Sprint Comments at 6.

\textsuperscript{236} \textit{Competitive Bidding Fifth Report and Order}, 9 FCC Rcd at 5588.
our strict holding requirements may actually be hampering the ability of entrepreneurs to attract the capital necessary to construct and operate their systems. In particular, lenders and investors have expressed concern about the need for more flexibility in the event of financial distress and default. Because we do not want investors to shy away from financing C and F block winners due to such concerns, we modify our holding rule today in a manner that continues to promote small and entrepreneurial ownership in broadband PCS licenses.

84. We believe that our amendment to the holding requirement serves the public interest by helping to ensure rapid and uninterrupted service to the public. We agree with Bear Stearns that market-oriented solutions in the event of financial distress will help avoid PCS license defaults to the Commission and the accompanying investor and/or service disruption that such defaults engender. Market-oriented solutions to problems of financial distress will often be preferable to the FCC reclaiming and reauctioning licenses, and we believe this amendment will promote such a result by allowing transfers to entrepreneurs who may be better prepared than the original licensee to construct and provide service. We thus amend Section 24.839 of our rules to permit the transfer of entrepreneurs' block licenses in the first five years to any entity that either holds other entrepreneurs' block licenses (and thus at the time of auction satisfied the entrepreneurs' block criteria) or that satisfies the criteria at the time of transfer. There will be no restrictions on transfers after the fifth year. We note, however, that our unjust enrichment provisions will continue to apply as before. We further amend our holding rule to exempt pro forma transfers and assignments because trafficking concerns do not exist under such circumstances.

III. The Cincinnati Bell Remand
A. The Cellular/PCS Cross-ownership Rule

85. Background. In light of the Sixth Circuit's ruling in Cincinnati Bell remanding the Commission's rule limiting cellular operators' eligibility for PCS licenses, we asked for comment on whether our cellular/PCS cross-ownership rule should be relaxed or retained. Under this rule, no cellular licensee may be granted a license for more than 10 MHz of broadband PCS spectrum prior to the year 2000 if the grant will result in a significant overlap of a cellular licensee's Cellular

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237 Bear Stearns Reply Comments at 4. See also North Coast Comments at 14-15.

238 See, e.g., Competitive Bidding Fifth Memorandum Opinion and Order, 10 FCC Rcd at 471 (lenders and entrepreneurs' block licensees are free to agree contractually to their own terms regarding situations where the licensee has defaulted on the Commission's installment payment program, and possibly other obligations). See also Letter from Cook Inlet Communications to William E. Kennard, April 22, 1996 (suggesting plans for dealing with C block defaults).

239 See 47 C.F.R. §§ 24.711(c) and 24.712(d) and 47 C.F.R. §§ 24.716(c) and 24.717(d).

240 See Implementation of Sections 3(n) and 332 of the Communications Act, Third Report and Order, GN Docket 93-252, 9 FCC Rcd 7988, 8160 (1994) (“CMRS Third Report and Order”).
Geographic Service Area ("CGSA") and the PCS service area. After the year 2000, cellular licensees will be allowed to obtain a grant of 15 MHz of PCS spectrum in an area that overlaps significantly with their CGSA. We asked commenters to address whether there are reasons for maintaining the separate cellular/PCS cross-ownership provisions or the 40 MHz PCS spectrum cap, or, on the other hand, whether we should eliminate these caps in favor of a single, more relaxed 45 MHz CMRS cap.

86. **Comments.** Most commenters support relaxing and simplifying our cellular/PCS ownership limitations by implementing a single spectrum cap. A majority of those commenters that support a single cap suggest eliminating the cellular/PCS and general PCS spectrum caps in favor of the single 45 MHz CMRS spectrum cap. Such commenters believe that the 45 MHz spectrum cap for all CMRS is an adequate check on the power of cellular licensees to influence the broadband PCS market. More specifically, they argue that there is little risk that a cellular licensee will exert undue market power if allowed to acquire 20 MHz of broadband PCS spectrum. For instance, GTE argues that the high cost of acquiring PCS licenses and constructing systems will adequately deter cellular companies from acquiring such licenses purely to prevent competition. Additionally, CTIA argues that the risk to innovation by limiting cellular providers' participation in broadband PCS is a greater concern than the risk of increased market concentration or undue market power. CTIA asserts further that relaxing cellular carriers' ownership restrictions would be good for consumers because it would result in better service and

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241 47 C.F.R. § 24.204(a). "Significant overlap" occurs when 10 percent or more of the population of the PCS service area is contained within the CGSA. 47 C.F.R. § 24.204(c). A CGSA is the composite of the service areas of all of the cells in the system, with certain exceptions. 47 C.F.R. § 22.903.

242 47 C.F.R. § 24.204(b).

243 Under Section 24.229 of our rules, broadband PCS licensees may not have an ownership interest in frequency blocks that total more than 40 MHz and serve the same geographic area. 47 C.F.R. § 24.229(c).

244 Under Section 20.6 of our rules, no licensee in the broadband PCS, cellular, or SMR services regulated as CMRS may have an attributable interest in a total of more than 45 MHz of licensed broadband PCS, cellular and SMR spectrum regulated as CMRS with significant overlap in any geographic area. 47 C.F.R. § 20.6(a).

245 See PCS Coalition Comments at 15; CTIA Comments at 2-4; Cellular Communications of Puerto Rico, Inc. Comments at 2-6 ("CCPR"); AT&T Comments at 9; BellSouth Comments at 3-10; Alliance Comments at 8-9; Vanguard Comments at 5; ALLTEL Comments at 8-9; PersonalConnect Comments at 4; RTC Comments at 8-9; Western Comments at 7; NextWave Reply Comments at 7-8. See also TPCS Comments at 4.

246 See PCS Coalition Comments at 15; CTIA Comments at 2-4; CCPR Comments at 5-6; AT&T Comments at 9; BellSouth Comments at 3-10; Alliance Comments at 8-9; Vanguard Comments at 5; ALLTEL Comments at 8-9 (supporting a single modified Part 20 spectrum cap under which any non-controlling interest of 49% or less would be non-controlling interest); NextWave Reply Comments at 7-8. See also GTE Comments at 8-9.

247 Coalition Comments at 15; Vanguard Comments at 5; GTE Comments at 8-9.

248 CTIA Comments at 4; AT&T Comments at 9 and Reply Comments at 6-7; PCS Coalition Comments at 15.

249 GTE Comments at 8.
lower prices.\textsuperscript{250} CCPR asserts that, with two cellular licensees, enhanced SMR, mobile satellite service, and at least three facilities-based PCS market entrants soon to be in every service area, the competition in mobile telephony promises to be frenzied and true price competition among mobile telephony providers exists.\textsuperscript{251} According to BellSouth, the 45 MHz CMRS cap will prevent cellular carriers from exerting undue market power and will not give cellular carriers a competitive advantage because it will ensure that there will be at least five separate broadband CMRS providers in each market.\textsuperscript{252}

87. CTIA suggests that if a single 45 MHz CMRS spectrum cap is maintained, the percentage of population overlap between service areas which triggers this rule should be increased from 10 percent to 40 percent.\textsuperscript{253} CTIA argues that the overlap restriction should be relaxed because the risk of collusion among competitors is lower than is first apparent.\textsuperscript{254} CTIA further contends that in order for the weighted average market share of a cellular licensee acquiring a 30 MHz PCS license to exceed the 23.5 percent market share allowed a non-cellular licensee under the 40 MHz PCS cap, the population overlap would have to exceed 40 percent.\textsuperscript{255} The Alliance proposes that MTA pops be used to calculate overlap for BTA licensees who own or acquire cellular systems within that BTA.\textsuperscript{256} Western argues that the 10 percent standard for population overlap should be raised to at least 20 percent.\textsuperscript{257} Western contends that permitting cellular licensees to dovetail the irregular boundaries of cellular markets with PCS markets would promote seamless wireless coverage since a PCS licensee that already provides service in rural areas on its cellular facilities is more likely to provide seamless coverage and provide wireless service to rural areas than non-cellular licensees.\textsuperscript{258}

88. Radiofone asserts that the Commission should eliminate the cellular/PCS cross-ownership rule because there is no evidence to support such a rule, and that the 45 MHz CMRS spectrum cap should also be eliminated because it forecloses businesses such as Radiofone from

\textsuperscript{250} CTIA Comments at 5-6 (citing Charles River Associates Analysis).
\textsuperscript{251} CCPR Comments at 2.
\textsuperscript{252} BellSouth Comments at 7.
\textsuperscript{253} CTIA Comments at 12-13.
\textsuperscript{254} CTIA Comments at 6.
\textsuperscript{255} CTIA Comments at 12-13.
\textsuperscript{256} Alliance Comments at 8-9.
\textsuperscript{257} Western Reply Comments at 7.
\textsuperscript{258} Western Comments at 15-18.
obtaining a 30 MHz PCS license.\textsuperscript{259} Radiofone contends that limiting cellular carriers to 20 MHz of PCS spectrum under the 45 MHz cap is as arbitrary as limiting them to 10 MHz under the cellular/PCS cross-ownership rule,\textsuperscript{260} and that the cap should be eliminated for all PCS auctions.\textsuperscript{261} Radiofone also argues that changes in the spectrum caps should be applied to all of the broadband PCS licenses in the MTAs and BTAs where Radiofone and its affiliates provide cellular service.\textsuperscript{262} GTE also opposes any CMRS spectrum aggregation limits on the grounds that they unduly restrain legitimate business activities and are not supported by any evidence. GTE asserts, however, that if the Commission adopts a cap, the 45 MHz CMRS cap is sufficient on its own to ensure diversity of ownership.\textsuperscript{263}

89. APC argues that the proposal to eliminate the 40 MHz PCS spectrum cap is not called for either by \textit{Cincinnati Bell} or by current marketplace conditions.\textsuperscript{264} APC contends that the 40 MHz cap has been successful in promoting competition, as shown by the numerous new market entrants that have emerged to bid aggressively on the 30 MHz PCS licenses.\textsuperscript{265} APC further argues that changing the rules at this late juncture would undermine the companies' reliance on the rules.\textsuperscript{266} Gulfstream also argues that A, B, and C block licensees should not be allowed to obtain a 10 MHz PCS license because this would encourage spectrum warehousing.\textsuperscript{267}

90. Several commenters contend that the existing cross-ownership rule should be retained.\textsuperscript{268} Sprint argues that liberalizing the rules after they have been in effect during the A, B, and C block auctions could seriously disadvantage entities that made business decisions based on the existing caps and thus invite legal challenge.\textsuperscript{269} TEC believes that the current rules ensure a

\textsuperscript{259} Radiofone Comments at 1-5; \textit{see also} BellSouth Reply Comments at 2-3.
\textsuperscript{260} Radiofone Comments at 3.
\textsuperscript{261} \textit{Id.} \textit{See also} Western Comments at 7-8.
\textsuperscript{262} Radiofone Reply Comments at 12-13.
\textsuperscript{263} GTE Comments at 8-9.
\textsuperscript{264} Sprint Spectrum & American Personal Communications Reply Comments at 1 ("APC").
\textsuperscript{265} \textit{Id.} at 4.
\textsuperscript{266} \textit{Id.} at 5.
\textsuperscript{267} Gulfstream Comments at 8.
\textsuperscript{268} \textit{See} Sprint Comments at 9; TEC Comments at 13; Conestoga Comments at 4; CIRI Comments at 11-12; DCR Comments at 12-14; Mountain Solutions Comments at 10-11; RAA Comments at 12; Bray Comments at 2; TDS Comments at 4 and Reply Comments at 2-3; RAA Reply Comments at 3; Ameritech Reply Comments at 2; OmniPoint Reply Comments at 6-10; CIRI Reply Comments at 8; PCIA Reply Comments at 6; Columbia Comments at 2.
\textsuperscript{269} Sprint Comments at 9; Sprint Reply Comments at 4; \textit{see also} TDS Reply Comments at 2; Ameritech Reply Comments at 2-3.
competitive market since cellular licensees are the only companies providing large-scale wireless telephone service to the public and PCS is a potential competitor in this market.\textsuperscript{270} DCR asserts that cellular companies would have a distinct advantage over small companies if their entry into PCS were not restricted because cellular companies already have name recognition, existing systems, and the use of free spectrum.\textsuperscript{271} DCR also argues that a cellular provider is more likely to use its PCS license to offer new services in a new market where it has no preexisting infrastructure of its own than in a geographic area where it has existing infrastructure and may instead expand its cellular subscriber base.\textsuperscript{272} OmniPoint contends that the cellular/PCS cross-ownership rule is still needed because cellular providers still maintain substantial market power and advantages over new entrants, such as a strong customer base, duopoly profits for reinvestment in system infrastructure, and greater flexibility and opportunities for site locations.\textsuperscript{273} Cox argues that removing the cellular/PCS cross-ownership cap or expanding the existing cap threatens the development of PCS as a stand-alone competitor to cellular and could relegate it to secondary status as a complementary service to cellular. Cox also argues that any move to adopt a single CMRS spectrum cap and eliminate the PCS and cellular/PCS spectrum caps must address the fact that while cellular providers could easily aggregate PCS spectrum to reach the CMRS cap with two 10 MHz PCS licenses, PCS providers will be able to acquire the same amount of spectrum only if they aggregate SMR frequencies.\textsuperscript{274} NCMC argues that relaxation of the existing caps would only encourage warehousing of CMRS spectrum.\textsuperscript{275}

91. KMTel and NCMC suggest that the Commission tighten its cellular/PCS cross-ownership rule and PCS spectrum cap. Both commenters support prohibiting cellular companies from holding any D, E, and F block PCS licenses where they already have cellular interests.\textsuperscript{276} NCMC argues that the C block auction results provide new evidence that the Commission has not avoided excessive concentration of ownership or ensured the dissemination of licenses to a wide variety of applicants.\textsuperscript{277}

92. PersonalConnect and NCMC argue that the CMRS cap should be reduced to a 35

\textsuperscript{270} TEC Comments at 13-14. See also CIRI Comments at 11-12.
\textsuperscript{271} DCR Comments at 13-14.
\textsuperscript{272} DCR Reply Comments at 10-11.
\textsuperscript{273} OmniPoint Reply Comments at 9.
\textsuperscript{274} Cox Communications, Inc. Reply Comments at 4-6 ("Cox").
\textsuperscript{275} NCMC Reply Comment at 9.
\textsuperscript{276} KMTel Comments at 7; NCMC Comments at 16.
\textsuperscript{277} NCMC Comments at 17-18.
MHz limit. NCMC contends that a 35 MHz cap would put all CMRS providers on level footing.

93. **Decision.** We agree with the majority of commenters that a spectrum cap is necessary in order to avoid excessive concentration of licenses and promote and preserve competition in the CMRS marketplace. We thus decline to accept the suggestions of Radiofone and GTE that we eliminate all limitations on the amount of spectrum a single entity (or affiliated entities) may acquire. For the reasons set forth below, we will maintain the 45 MHz CMRS spectrum cap and eliminate the PCS and cellular/PCS spectrum caps. Although we eliminate the 35 MHz cellular/PCS spectrum cap remanded by the Sixth Circuit in favor of the less restrictive 45 MHz CMRS spectrum cap, we also provide below additional economic support for limits on ownership of CMRS licensees.

94. We adopted the 45 MHz CMRS spectrum cap in the *CMRS Third Report and Order* in order to "discourage anti-competitive behavior while at the same time maintaining incentives for innovation and efficiency." We were concerned that "excessive aggregation [of spectrum] by any one of several CMRS licensees could reduce competition by precluding entry by other service providers and might thus confer excessive market power on incumbents." The continuation of the 45 MHz spectrum cap will promote competition and prevent anti-competitive horizontal concentration in the CMRS business. Up to a point, horizontal concentration can allow efficiencies and economies that would not be achievable otherwise, and can therefore be pro-competitive, pro-consumer, and in the public interest. At some point, however, horizontal concentration starts to work against those goals because it results in fewer competitors, less innovation and experimentation, higher prices and lower quality, and these disadvantages outweigh any advantages in terms of economies and efficiency.

95. For determining when concentration reduces competition to an undesirable level, one accepted tool is the Herfindahl-Hirschman Index ("HHI"), which is used in the Department of Justice and Federal Trade Commission Horizontal Merger Guidelines to measure market concentration. It has been accepted by courts and this Commission in numerous cases as a

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278 PersonalConnect Reply Comments at 3-4.

279 NCMC Reply Comments at 9.

280 The 45 MHz CMRS spectrum cap was not before the court in the *Cincinnati Bell* case. 69 F.3d at 765, n. 6.

281 *CMRS Third Report and Order*, 9 FCC Rcd at 8105.

282 *Id.* at 8101.

283 See 1992 Department of Justice - Federal Trade Commission Horizontal Merger Guidelines, 4 Trade Reg. Rep. (CCH) ¶ 20,569, § 1.5 ("DOJ/FTC Guidelines").
preliminary test of permissible and impermissible horizontal concentration. We find the HHI to be useful in the present situation because we lack empirical data about the actual performance of a market that includes both cellular service and fully deployed broadband PCS, which is under construction in almost all markets. An HHI analysis produces a number showing the degree of horizontal concentration in the market: an HHI of less than 1,000 shows an unconcentrated market, in which horizontal concentration is not a concern; an HHI between 1,000 and 1,800 shows a moderately concentrated market, in which certain ownership combinations "potentially raise significant competitive concerns depending on [certain] factors"; and an HHI over 1,800 shows a highly concentrated market, in which certain combinations "are likely to create or enhance market power or facilitate its exercise" unless a strong showing to the contrary is made.

In order to apply the HHI, a measurement of market share (e.g., in terms of customers, revenues, capacity or similar gauges) is necessary. Allocated spectrum is an appropriate measurement of market share for the purpose of analyzing the need for a spectrum cap because it is a measure of a CMRS carrier's long-term capacity and is easily available to the Commission. Capacity has been accepted in antitrust cases as a valid measure of market share. The 45 MHz CMRS spectrum cap is a simplified version of the HHI, using spectrum capacity as the measurement of market share as it limits the amount of licensed spectrum capacity that any one person or entity may have.

96. In addition to considering the arguments presented by commenters in this proceeding and in response to the Sixth Circuit's concern about the lack of economic support for the cellular/PCS spectrum cap, the Commission's competitive analysis staff performed an HHI analysis for various possible structures of a hypothetical market for mobile two-way voice communications service in the same geographic area. This analysis is set forth at Appendix A. In this market, the capacity in a local market is represented by the licensed spectrum for cellular service (two licenses for 25 MHz), broadband PCS (three licenses for 30 MHz and three licenses for 10 MHz), and the largest potential interconnected SMR provider (holding multiple licenses for a total of 10 MHz).

97. The Commission staff's HHI analysis indicates that the 45 MHz CMRS spectrum cap is needed to prevent undue market concentration and the noncompetitive conditions in local markets that result from such concentration. The pre-PCS market situation, consisting of two
cellular carriers each with 25 MHz has an HHI of 5,000 -- extremely high concentration\textsuperscript{288} The two, overlapping cellular carriers are already prohibited from owning more than a 5 percent interest in each other.\textsuperscript{289} The addition of a third carrier, an SMR provider with 10 MHz, lowers the HHI only to 3,750.\textsuperscript{290} Adding the spectrum capacity provided by the issuance of new PCS licenses, if there was no spectrum cap, might result in the two cellular incumbents dividing all the PCS spectrum between themselves. With no new entrants, this would leave the HHI at its previous high level,\textsuperscript{291} defeating a major purpose of the Commission in creating broadband PCS -- to bring more competition into the concentrated mobile telephony market.\textsuperscript{292} The analysis also shows that, even if there was somewhat less common ownership of PCS spectrum by incumbent cellular operators, the market would still be very highly concentrated without a cap on the ownership of spectrum capacity. For example, if each cellular carrier obtained a 30 MHz PCS license and a 10 MHz PCS license, another 40 MHz of PCS spectrum were held by a new entrant, and the SMR operator remained at 10 MHz, the HHI would still be 3133, far into the "highly concentrated" category.\textsuperscript{293}

98. In addition to these hypothetical results if there is no spectrum cap, we note that there are other factors that create a significant risk of such excessive concentration becoming reality. First, while new entrants can de-concentrate many businesses, CMRS markets have significant barriers to entry, most notably the need for spectrum, the expense of obtaining the license and the high costs of construction and operation of new communications systems. Thus, there would be little potential for new entrants to discipline the behavior of the incumbents in the absence of any spectrum cap. Second, the use of competitive bidding for assigning PCS licenses, or the cost of obtaining licenses in a post-auction market (\textit{i.e.}, private auctions), would put incumbents at an inherent advantage over new entrants. Economic theory teaches that auctions are won by the bidder who puts the highest value on the property being auctioned. The value of the PCS licenses to the incumbent providers would be their continued economic rents (profits in excess of economic costs), which could be higher than the anticipated profits of any new entrant into a more competitive market. Incumbent firms may thus be willing to pay even more for the chance to impede entry than for the chance to compete vigorously against new entrants. In such an event, the incumbent cellular and SMR licensees would be more likely to win all or most of the PCS licenses at auction, or pay above auction prices in the private, post-auction transactions. Accordingly, Congress specifically instructed the Commission to craft its rules for auctionable

\begin{itemize}
\item \textsuperscript{288} See Appendix A, Table 1B.
\item \textsuperscript{289} 47 C.F.R. § 22.942.
\item \textsuperscript{290} See, Appendix Table 1C.
\item \textsuperscript{291} See Id., Table 1E.
\item \textsuperscript{292} See Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, First Report, 10 FCC Rcd 8844, 8846, 8859, 8867 (1995).
\item \textsuperscript{293} See, Appendix Table 1F.
\end{itemize}
spectrum licenses to avoid excessive concentration of licenses and provide economic opportunities to a wide variety of applicants.\footnote{47 U.S.C. § 309(j)(3)(B); see also supra ¶ 16.}

99. Having a 45 MHz CMRS spectrum cap, in contrast to the above-described scenarios without a spectrum cap, will result in a market that has an HHI below 1,900, a tremendous improvement over a two- or three-competitor market. Although some scenarios under the 45 MHz cap could produce an HHI above 1800 \((i.e., 1898)\)\footnote{See Appendix A, Table 2E.} which the DOJ/FTC Guidelines would characterize as a highly concentrated market, we believe that, due to certain factors, the risk that significant competitive harm will occur is probably low in most cases. First, there are several other communications services each of which has some, though by no means full, cross-elasticity with cellular, broadband PCS, and interconnected SMR services. These other services are paging, narrowband and unlicensed PCS, 220 MHz service, air-ground service, maritime service, satellite-based mobile services, General Mobile Radio Service, General Wireless Communications Service, interconnected private radio systems, CB radio and other "low end" services, government radio systems, resellers of the foregoing services, and some wired local exchange service. Collectively, these services exert some competitive pressure on cellular, broadband PCS and interconnected SMR that is not reflected in the HHIs calculated by the Commission's competitive analysis staff. There is significant precedent for the use of such competitors as a mitigator of HHIs that are above optimum levels.\footnote{For example, in bank mergers where the HHIs of a relevant market consisting only of banks and savings and loans are above optimum levels, federal regulators often note the existence of credit unions and other "quasi-banks" as a successful defense to charges of uncompetitive concentration. See, e.g., Keycorp, 81 Fed. Res. Bull. 286, 288 & n.12 (1995) (HHI of 2,167); West One Bank, Idaho, 80 Fed. Res. Bull. 175, 176 (1994) (HHI of 3833); First Hawaiian, Inc., 77 Fed. Res. Bull. 52, 55-56 & nn.25, 29 (1991) (HHIs between 2696 and 3455).} Also, under the DOJ/FTC Guidelines, a highly concentrated market produces competitive concerns depending on certain factors, including how easy or difficult "coordinated interaction" is among the competitors, and whether entry by new competitors will be possible.\footnote{DOJ/FTC Guidelines, § 2-3.} Most plausible scenarios under the 45 MHz cap show at least six competitors, reducing the risk of coordinated interaction. With respect to entry, as the Commission allocates and assigns spectrum for more services that have some cross-elasticity of demand with broadband CMRS (cellular, broadband PCS, and wide-area SMR), a certain amount of increased competition from new competitors could open up more opportunities to enter the market. Additional opportunities to obtain spectrum may also arise through rules allowing for spectrum disaggregation and geographic partitioning, which are currently under consideration by the Commission.\footnote{See supra note 55.} In addition, the Commission is taking other significant steps to reduce entry barriers for entrepreneurs and small businesses pursuant to Sections 309(j)(3),
309(j)(4) and 257 of the Communications Act.\textsuperscript{299} Given these factors, we believe that concentration levels of 1,900 are acceptable and we conclude that the 45 MHz spectrum cap is necessary to prevent the CMRS market from becoming highly concentrated and to avoid an excessive concentration of licenses.

100. The 45 MHz spectrum cap is also needed specifically to prevent cellular licensees from gaining too great a competitive advantage over new entrants to the wireless telephony market.\textsuperscript{300} Cellular companies already hold licenses for 25 MHz of clear spectrum, and they already have technical expertise, customer bases, marketing operations, and antenna and transmitter sites.\textsuperscript{301} In short, cellular operators have a competitive position that is superior to that of any new market entrant. They also have strong incentives to preserve that existing advantage. By limiting current cellular licensees to an additional 20 MHz of spectrum (i.e., two of the three 10 MHz broadband PCS licenses), the 45 MHz cap will help to level the playing field for all new entrants, while ensuring that incumbent providers are not placed at any disadvantage. We therefore disagree with Radiofone's assertion that the 45 MHz CMRS spectrum cap should be eliminated because it arbitrarily prevents cellular carriers from obtaining large amounts of PCS spectrum.\textsuperscript{302}

101. Our 45 MHz spectrum cap also furthers the goal of diversity of ownership that we are mandated to promote under Section 309(j). Section 309(j) directs us, in specifying eligibility for licenses and permits, to avoid excessive concentration of licenses and disseminate licenses among a wide variety of applicants.\textsuperscript{303} The statute further states that in prescribing regulations, the Commission must, \textit{inter alia}, prescribe area designations and bandwidth assignments that promote economic opportunity for a wide variety of applicants.\textsuperscript{304} A spectrum cap is one of the most effective mechanisms we could employ to achieve these goals. More than provisions such as bidding credits and installment payments, which we have adopted to provide opportunities for new entrants in the wireless telephony marketplace, a spectrum cap set at an appropriate level will ensure that the licenses for any particular market are disseminated among diverse service providers. The \textit{Cincinnati Bell} decision questioned whether the cellular/PCS spectrum limit

\textsuperscript{299} See generally \textit{Market Entry Notice of Inquiry; Competitive Bidding Sixth Report and Order}, 11 FCC Rcd at 138; \textit{supra} note 9.

\textsuperscript{300} We note, however, that as more spectrum of a flexible nature is auctioned, our concerns regarding concentration could significantly diminish. See, \textit{e.g.}, Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, \textit{Notice of Proposed Rule Making}, WT Docket No. 96-6, 61 Fed. Reg. 6,189 (Feb. 16, 1996).

\textsuperscript{301} See DCR Comments at 13-14. CTIA also estimates that at year-end 1995 there were approximately 33.8 million cellular subscribers. \textit{U.S. Wireless Industry Survey Results: More than 9.6 Million Customers Added in 1995}, Cellular Telecommunications Industry Association News Release, Mar. 25, 1996.

\textsuperscript{302} Radiofone Comments at 3.


actually advanced this statutory objective.\textsuperscript{305} We note, however, that following the first auction for broadband PCS licenses, the number of competitors in every local market in the country doubled, from 2 to 4 licensees. In addition, the C block auction resulted in another new competitor in each local market -- 493 licenses will soon be awarded to just under 90 small and entrepreneurial businesses. With the cellular/PCS spectrum limit in place, American consumers were guaranteed and received three new competitors to the two cellular incumbents. Accordingly, we affirm that the cellular/PCS spectrum cap fulfilled the mandate of section 309(j) and the 45 MHz cap will continue to serve those objectives in future auctions and the post-auction market.

102. The court in the \textit{Cincinnati Bell} decision was also concerned that the cellular/PCS spectrum cap would "have a profound impact on businesses in an industry enmeshed in this country's telecommunications culture." It stated that "[t]he continued existence of some wireless communications businesses rests on their ability to bid on Personal Communications Service licenses" and that "Cellular providers foreclosed from obtaining Personal Communications Service licenses may ultimately be left holding the remnants of an obsolete technology."\textsuperscript{306} Upon further analysis, as discussed above, we have modified our rules in a way that provides cellular licensees additional flexibility to expand into or migrate to PCS technology. Under the old rule, they were limited to one 10 MHz block until the year 2000. The shift to a single 45 MHz spectrum cap will allow incumbent cellular operators to acquire up to two of the 10 MHz broadband PCS licenses (20 MHz) in the upcoming auction for the D, E and F blocks. As many commenters point out, an additional 20 MHz of spectrum will be sufficient to develop and provide new digital services. We note that cellular carriers have also been rapidly implementing digital and other new technologies\textsuperscript{307} with their current 25 MHz of spectrum and that even analog cellular systems are increasing subscribership and providing enhanced services.\textsuperscript{308}

103. While our analysis of the CMRS market under the DOJ/FTC Guidelines indicates that the 45 MHz spectrum cap is needed to ensure competition, it also shows that this cap adequately addresses our concerns about anticompetitive behavior. Indeed, our analysis of plausible market structures indicates that the concentration levels under the single 45 MHz spectrum cap would not be higher than the level that would be possible under all three of the

\begin{footnotesize}
\begin{enumerate}
  \item\textsuperscript{305} 69 F.3d at 764 (citing the results of the broadband PCS A and B block auction, in which 99 licenses issued were won by 19 companies).
  \item\textsuperscript{306} 69 F.3d at 764.
  \item\textsuperscript{307} See 47 C.F.R. \textsection 22.901(d) (permitting cellular carriers to utilize alternate technologies, including PCS).
  \item\textsuperscript{308} For example, Bell Atlantic NYNEX Mobile recently launched its Code Division Multiple Access ("CDMA") service in Trenton, New Jersey and Bucks County, Pennsylvania. \textit{Bell Atlantic NYNEX Mobile Launches CDMA Service Using Lucent Technologies Equipment}, News Release, Mar. 25, 1996. Additionally, AirTouch has begun using its new CDMA technology in parts of its Los Angeles service area. \textit{AirTouch Inaugurates Powerband Service in Largest U.S. Cellular Market}, News Release, May 14, 1996.
\end{enumerate}
\end{footnotesize}
existing caps. Thus, we conclude that the PCS and cellular/PCS spectrum caps are unnecessary.

104. We also believe that elimination of the cellular/PCS cross-ownership rule and the 40 MHz PCS spectrum cap in favor of the single 45 MHz CMRS spectrum cap has important advantages. Applying the single 45 MHz CMRS cap will give both cellular and PCS providers more flexibility to participate in a more competitive marketplace. A single 45 MHz cap will now enable cellular licensees to obtain 20 MHz of broadband PCS spectrum. We believe that with the advent of digital and other new technologies, 20 MHz of PCS spectrum will be more than sufficient to allow cellular licensees to develop new services in the CMRS market. Furthermore, we disagree with APC that current marketplace conditions do not call for a change in our PCS rules. As APC notes, numerous new market entrants have emerged to bid aggressively on the 30 MHz PCS licenses. Given this source of new competition, we believe it is appropriate to relax our PCS ownership restrictions. The elimination of the cellular/PCS and PCS limits will give PCS providers greater flexibility to own interests in other providers and provide additional services and, hence, enhanced opportunities to compete. In addition, PCS providers will no longer be restricted to less than a 5 percent ownership interest in cellular and other PCS licensees in order to avoid attribution. Instead, they will be subject to the more liberal 20 percent attribution level for all CMRS.

105. We also note that the 1996 Act requires the Commission to determine in every even-numbered year (beginning with 1998) "whether any regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service" and to modify or repeal such regulation. In an effort to streamline our regulations now, consistent with the spirit of the 1996 Act, and in light of the findings set forth above, we believe that simplifying our rules to include a single 45 MHz CMRS cap in place of the three separate spectrum caps is warranted. In addition, at the next biennial review of the Commission's regulations under the 1996 Act and in our annual reports on the state of competition in the CMRS market, we will continue to evaluate the need for the 45 MHz spectrum cap in its present form.

106. We decline to alter the 10 percent overlap restriction for the CMRS cap as some

\[\text{\footnotesize{309 Compare Appendix 1, Tables 2D-E and Tables 3A-B.}}\]
\[\text{\footnotesize{310 See PersonalConnect Comments at 4; CCPR Comments at 4-5.}}\]
\[\text{\footnotesize{311 APC Reply Comments at 4.}}\]
\[\text{\footnotesize{312 See 47 C.F.R. §§ 24.204(d)(2)(i), 24.229(c)(2).}}\]
\[\text{\footnotesize{313 See infra at ¶¶ 117-119.}}\]
\[\text{\footnotesize{314 47 U.S.C. § 161(a)(2).}}\]
\[\text{\footnotesize{315 See 47 U.S.C. § 332(c)(1)(C).}}\]
commenters suggest. We continue to believe that an overlap of less than 10 percent of the population is sufficiently small that the potential for exercise of undue market power by the cellular operator is slight.\textsuperscript{316} Given our decision to eliminate the cellular/PCS and PCS ownership limitations, we are also concerned that greater overlap might lead to anticompetitive practices. We will, however, expand the post-auction divestiture provisions of Section 20.6 to conform with the divestiture provisions that previously applied in our cellular/PCS cross-ownership rule, including the relaxed rule applicable to situations where the overlap exceeds 10 percent, but is less than 20 percent.\textsuperscript{317} Thus, any party holding an attributable ownership interest in a CMRS licensee may be a party to a broadband PCS application if it certifies that, if necessary, it will come into compliance with the CMRS spectrum cap through our post-auction divestiture procedures.\textsuperscript{318}

B. The 20 Percent Attribution Standard

107. **Background.** Section 24.204(d)(2)(ii) of our rules provides that partnership and other ownership interests and any stock interest amounting to 20 percent or more of the equity or outstanding stock of a cellular licensee will be attributable for purposes of determining whether an entity is a cellular operator and subject to the cellular/PCS cross-ownership rule.\textsuperscript{319} Section 24.204(d)(2)(ii) of our rules also provides that cellular ownership interests held by small businesses, rural telephone companies, and businesses owned by minorities or women are not attributable until they reach at least 40 percent.\textsuperscript{320} The Court in *Cincinnati Bell* held that our 20 percent cellular attribution rule was arbitrary on the ground that the rule does not bear a reasonable relationship to whether a party with a minority interest in a cellular licensee actually has the ability to control that licensee.\textsuperscript{321}

108. In the *Notice*, we requested comment on whether we should retain or modify our ownership attribution rule for cellular licensees interested in acquiring broadband PCS licenses. Given other issues raised in the *Notice*, we asked whether our approach should depend on whether we modify our cellular/PCS cross-ownership rule or, in the alternative, eliminate this rule and retain only our 45 MHz CMRS spectrum cap. We also asked whether we should, in any case, modify the 20 percent attribution standard applicable to the 45 MHz CMRS spectrum cap in light of the Sixth Circuit’s opinion regarding this standard in connection with our cellular/PCS cross-

\textsuperscript{316} Amendment of the Commission's Rules to Establish New Personal Communications Services, Second Report and Order, Gen Docket 90-314, 8 FCC Rcd 7700, 7745 (1993) ("PCS Second Report and Order").

\textsuperscript{317} 47 C.F.R. § 24.204(f)(A).

\textsuperscript{318} See 47 C.F.R. § 20.6(e).

\textsuperscript{319} 47 C.F.R. § 24.204(d)(2)(ii).

\textsuperscript{320} Id.

\textsuperscript{321} *Cincinnati Bell*, 69 F.3d at 759-61.
ownership rule. We also proposed to modify the 40 percent attribution rules related to both the cellular/PCS cross-ownership and CMRS spectrum aggregation limit provisions for F block purposes, as we did for the C block, by removing the provisions that increase the attribution threshold to 40 percent if the holder of the ownership interest is a woman- or minority-owned business.

109. Comments. Many commenters assert that the 20 percent attribution standard should not be altered. Vanguard argues that most of the principal cellular companies are now publicly traded and, therefore, a 20 percent interest held by a single shareholder clearly would create the possibility of at least de facto control. Cox opposes a "controlling interest" test because it would be ineffective, subject to undetectable manipulation, and difficult to enforce. Furthermore, Cox asserts that bright-line attribution rules traditionally have been used by the Commission as an effective and efficient means of identifying cognizable opportunities for influence and control, and in fact, the Commission has used a lower standard (e.g., 5 percent) in other services. DCR argues that control is not the Commission's concern in determining what level of investment should be considered a cognizable interest. Rather, the Commission has traditionally been concerned with the potential for significant influence over management or operational decisions. Where that concern is especially significant, as it is here, the Commission has generally and reasonably opted for a more inclusive attribution rule. TDS contends that the attribution levels for all of the existing spectrum caps should remain the same in order to avoid uncertainty about competitive entry opportunities and delay of service due to litigation. Conestoga, the Alliance, and Cox also support our proposal to adopt a 40 percent attribution standard for small businesses and rural telephone companies as we did for the C block.

110. TEC, Mountain Solutions, and OmniPoint argue that a stricter 10 percent attribution standard, such as that promulgated by Congress in the definition of "affiliate" in the 1996 Act, should apply to the cellular/PCS cross-ownership rule. TEC and Mountain Solutions further

322 Conestoga Comments at 4; Vanguard Comments at 6; Alliance Comments at 9; Cox Reply Comments at 6; DCR Reply Comments at 12; TDS Reply Comments at 2; APC Reply Comments at 6; Sprint Reply Comments at 2-4; PCIA Reply Comments at 7-8.

323 Vanguard Comments at 6.

324 Cox Reply Comments at 7.


326 TDS Reply Comments at 2.

327 Alliance Comments at 9; Conestoga Comments at 4; Cox Reply Comments at 6-8.

328 TEC Comments at 15; Mountain Solutions Comments at 12; OmniPoint Reply Comments at 11. See 47 U.S.C. § 153(1).
argue that use of a statutory benchmark should prevent further court challenge. In contrast, however, CBT contends that nothing in the 1996 Act suggests that the 10 percent standard should be applied for attribution purposes in PCS licensing.

111. Several commenters assert that a control test should be used for attribution purposes instead of a bright-line standard. They argue, *inter alia*, that a bright-line standard does not effectively determine control in most cases and, instead, control must be determined under the specific facts of each case. They assert that the Commission should consider a standard based on control in light of the Commission's previous failure to examine less restrictive alternatives to a bright-line rule. Western also argues that the Commission should focus primarily on those ownership interests that it has recognized in the context of cellular/PCS ownership restrictions as potentially having the most anticompetitive effect (*i.e.*, controlling interests).

112. CBT contends that a single majority shareholder exception should apply to the existing attribution rule. Specifically, CBT suggests that no minority stock or limited partnership interest should be attributable if a single holder (or group of affiliated holders) owns more than 50 percent of the outstanding stock or partnership equity or has voting control of the licensee's affairs. CBT also argues that no commenter has presented any new reason for or evidence supporting a 20 percent attribution rule.

113. CTIA argues that the attribution level should be increased from 20 percent to a level between 30 and 35 percent. CTIA asserts that the danger of undue market power in a single firm is sharply constrained by the 45 MHz CMRS spectrum cap, under which a controlling shareholder is limited to a market share of 26.5 percent, a percentage well below the 35 percent threshold recognized to be necessary for undue market power. CTIA also supports adoption of a single

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329 TEC Comments at 15; Mountain Solutions Comments at 12.
330 Cincinnati Bell Telephone Co. Comments at 2 ("CBT").
331 AT&T Comments at 10; BellSouth Comments at 11-12; US West Comments at 1; GTE Comments at 12; RTC Comments at 9; Western Comments at 22.
332 GTE Comments at 12.
333 Western Comments at 23.
334 Western Reply Comments at 12-13.
335 CBT Comments at 4; CBT Reply Comments at 3-4. *See also* RTC Comments at 10-11; CTIA Comments at 15.
336 CBT Comments at 4.
337 CBT Reply Comments at 2.
338 CTIA Comments at 14.
majority shareholder exception to its suggested higher attribution level.\textsuperscript{339} AT&T and RTC suggest that if a control-based rule is not adopted, then a 40 percent threshold, as applied to small businesses and rural telephone companies in the C block, should apply because there is no evidence that this level has created opportunities for anticompetitive behavior.\textsuperscript{340}

114. ICGC and ONE argue that the attribution rules adopted in the \textit{Competitive Bidding Fifth Report and Orders} should be reinstated. They contend that this approach will create meaningful opportunities for small businesses in accordance with Congressional intent.\textsuperscript{341}

115. GTE and DCR argue that any change to the attribution rule should be applied prospectively because retroactive application of any rule changes would be harmful to PCS licensees, would not serve the public interest, and would be contrary to federal law.\textsuperscript{342} In contrast, CBT believes that because the old attribution rule was defective from the start, any licensing that took place under the old rule is of questionable validity and those aggrieved by the old rule should be allowed to obtain redress.\textsuperscript{343}

116. Decision. Our decision to eliminate the 35 MHz cellular/PCS spectrum cap renders the issue of whether to modify the attribution standard of Section 24.204(d) of our rules moot.\textsuperscript{344} We reaffirm, however, the 20 percent attribution standard for the purpose of determining whether an entity is subject to the 45 MHz CMRS spectrum aggregation limit. We also conclude that the attribution standard for the 45 MHz spectrum cap should be made race- and gender-neutral such that a 40 percent attribution standard applies to all small businesses and rural telephone companies. We believe that extending the 40 percent threshold to noncontrolling investors in small businesses as we did for the C block licenses will promote additional investment in small business applicants and ensure broad participation in PCS by designated entities.\textsuperscript{345}

117. We agree with Vanguard that a 20 percent interest held by a single entity would create a possibility of \textit{de facto} control.\textsuperscript{346} Such an interest (whether 20 percent or less) that

\begin{itemize}
\item \textsuperscript{339} \textit{Id.} at 15.
\item \textsuperscript{340} AT&T Comments at 10; RTC Comments at 9-10.
\item \textsuperscript{341} ICGC Comments at 1-3; ONE Comments at 1-3.
\item \textsuperscript{342} GTE Comments at 13; DCR Reply Comments at 13.
\item \textsuperscript{343} CBT Reply Comments at 5.
\item \textsuperscript{344} 47 C.F.R. 24.204(d); \textit{see supra }\S \textsuperscript{94}.
\item \textsuperscript{345} \textit{See Competitive Bidding Sixth Report and Order}, 11 FCC Rcd at 162.
\item \textsuperscript{346} Vanguard Comments at 6. \textit{See also} Implementation of Sections 3(n) and 332 of the Communications Act - Regulatory Treatment of Mobile Services, \textit{Third Report and Order}, GN Docket No. 93-252, 9 FCC Rcd 7988, 8114 (1994) (citing FASB Accounting Principals Board Opinion No. 18 (1970)).
\end{itemize}
conveys to its holder actual working control (including investor control) is already attributable under our rules.\textsuperscript{347} We believe generally, however, that even an entity that does not have \textit{de facto} or \textit{de jure} control but owns a 20 percent or more interest in a licensee would have sufficient influence to reduce competition and should be subject to the CMRS spectrum aggregation limit.\textsuperscript{348} Historically, we have included for attribution purposes those ownership and other interests that convey a degree of control or "influence" to their holder sufficient to warrant limitation.\textsuperscript{349} "Influence" has been viewed as "an interest that is less than controlling, but through which the holder is likely to induce a licensee or permittee to take actions to protect the investment."\textsuperscript{350} We note that attribution rules for other services typically apply much lower ownership benchmarks of 5 to 10 percent. Both cable and broadcast use a 5 to 10 percent attribution level. In the broadcast multiple ownership context, for example, any interest amounting to 5 percent or more of the outstanding voting stock of a corporate broadcast licensee, cable television system or daily newspaper is attributable.\textsuperscript{351} Interests held by certain passive investors are attributable if they amount to 10 percent or more of the outstanding voting stock.\textsuperscript{352} In the contexts of cable operator/broadcast network cross-ownership,\textsuperscript{353} cable national subscriber (horizontal) limits,\textsuperscript{354} cable channel occupancy (vertical) limits,\textsuperscript{355} and the MDS/cable cross-ownership limit,\textsuperscript{356} the attribution standards are identical to those used in broadcasting. We further note, as do some commenters, that the 1996 Act defines "affiliate" as a "person that . . . owns or controls, is owned or controlled by, or is under common ownership or control with, another person. . . [The] term 'own' means to own an equity interest (or the equivalent thereof) of more than 10 percent."\textsuperscript{357}

118. We continue to believe that a higher benchmark of 20 percent should apply for

\textsuperscript{347} 47 C.F.R. § 20.6(d)(1).

\textsuperscript{348} See Cox Reply Comments at 7; DCR Reply Comments at 12.

\textsuperscript{349} See Attribution Notice, 10 FCC Rcd at 3609. See also 47 C.F.R. § 20.6(d)(9) (attributing certain management agreements).

\textsuperscript{350} Attribution Notice, 10 FCC Rcd at 3609-10 (citing Amendment of Multiple Ownership Rules, 18 FCC Rcd 288, 292-93 (1993)).

\textsuperscript{351} 47 C.F.R. § 73.3555, n. 2.

\textsuperscript{352} Id. See also Attribution Notice, 10 FCC Rcd at 3628-30 (where the Commission sought comment on whether the 10 percent attribution level should be raised).

\textsuperscript{353} 47 C.F.R. § 76.501, n. 2.

\textsuperscript{354} 47 C.F.R. § 76.503(f).

\textsuperscript{355} 47 C.F.R. § 76.504(h).

\textsuperscript{356} 47 C.F.R. § 21.912(c), n. 1.

\textsuperscript{357} 47 U.S.C. § 153(l).
purposes of the CMRS spectrum cap in order to encourage capital investment and business opportunities in CMRS. Given the changing technology and the variety of competing services that will be subject to this limitation, we believe that increased flexibility in our rules will enable CMRS providers to adapt their services to meet customer demand.\textsuperscript{358} Furthermore, we originally adopted a 20 percent attribution level in our cellular/PCS cross-ownership rules to allow partial owners of cellular licensees to participate in PCS, in light of several partial and often passive ownership interests that may have resulted from early settlements during the initial phase of cellular licensing.\textsuperscript{359} We continue to believe that cellular providers should be given ample opportunity to compete in the CMRS market, given the role that existing infrastructure and technologies can play in speeding the deployment of new technologies.\textsuperscript{360} Thus, we believe that maintaining a 20 percent attribution level for the CMRS cap will allow a wide variety of players (\textit{i.e.}, PCS, cellular and SMR providers) to enter the marketplace while still preventing anticompetitive practices that would have harmful effects on consumers.

119. We disagree with commenters who suggest that only controlling interests should be attributable. Establishing a control test would require us to conduct frequent case-by-case determinations of control, which are time-consuming, fact-specific, and subjective. The bright line 20 percent attribution rule avoids these problems. Also, for the reasons discussed below, a single majority shareholder exception to the rule is not appropriate for all situations involving CMRS licensees and their owners, and so adoption of such an exception is not a suitable bright line substitute for 20 percent attribution. However, we adopt a less restrictive alternative and allow licensees with non-controlling minority investors with potentially conflicting CMRS ownership interests to seek waivers of the spectrum cap rule where the licensee is controlled by a single majority shareholder or controlling general partner.

120. We reject a control-based attribution test because significant, but non-controlling, investments have sufficient potential to affect the level of competition in the CMRS market. The CMRS spectrum cap ownership attribution rule, just as all other ownership attribution rules and similar statutory provisions, must take such interests into account. Economic theory predicts that where a CMRS licensee owns a substantial portion of one of its competitors, neither company has as strong an incentive to compete vigorously against its partner as it does with respect to an unrelated competitor. That is the case for several reasons. A company that is entitled to a substantial percentage of the profit generated by its competitor will be reluctant to undercut the competitor's price -- doing so would amount to taking money out of its own pocket. Rather than compete on price, both companies have an incentive to maintain a high price level by coordinated interaction. In any event, the minority shareholder, would have an incentive to stifle vigorous price competition. It would also have the capability of doing so, because a minority owner may exert influence over the company by challenging various business decisions, by conducting (or

\textsuperscript{358} See \textit{CMRS Third Report and Order}, 9 FCC Rcd at 8010.

\textsuperscript{359} \textit{PCS Second Report and Order}, 8 FCC Rcd at 7745.

\textsuperscript{360} See also CTIA Comments at 4-5; CCPR Comments at 5; Radiofone Comments at 4.
even just threatening) litigation, by refusing to provide additional capital, by insisting upon business audits, or by using other mechanisms by which minority owners protect their investments in closely held firms.

121. Theoretical analysis has demonstrated that partial ownership interests can create the very non-competitive markets that we want to avoid.\textsuperscript{361} Even "silent financial interests" -- \textit{i.e.}, non-controlling shares -- may affect the behavior of the partly owned company by causing the minority owner to take into account its behavior on the profits of its partly owned competitor. Indeed, as noted above, Congress was also apparently concerned about such competitive incentives when it defined ownership in the 1996 Act to mean an interest of ten percent.\textsuperscript{362} The Communications Act also limits foreign ownership interests in CMRS licenses to 20 percent.\textsuperscript{363} Although these statutory ownership attribution criteria do not directly apply to our CMRS ownership attribution rules, they indicate that Congress believed that even non-controlling, minority ownership interests can convey significant influence to their holders. As discussed above, other Commission rules attribute ownership interests of as little as five percent.\textsuperscript{364}

122. Moreover, in a market such as the CMRS market, reduced competitive incentives between co-owned firms have the additional danger of potentially reducing competition in the entire market. As discussed above, the CMRS market will be fairly concentrated to begin with -- it will have at most five or six competitors, yielding an HHI index in the moderately concentrated range (and one of those competitors will be a small business 40 percent of which might be owned by one of its competitors) -- and significant new entry into the market by new competitors will not be possible (at least in the short run). Theory predicts that in that situation, a reduction in competition between two of the participants in the market will in turn reduce competition among the remaining participants.\textsuperscript{365} That reduction in competition occurs because the market effectively becomes an even more concentrated oligopoly, in which \textit{all} of the companies are better off keeping prices high and competing instead on such matters as corporate image.

123. We recognize that small businesses and rural telephone companies, as well as non-controlling investors in small businesses, may have non-attributable ownership of up to 40 percent


\textsuperscript{362} See 47 U.S.C. § 153(1) (defining the terms "affiliate" and "own").

\textsuperscript{363} 47 U.S.C. § 310(b)(3); \textit{see also} 47 C.F.R. § 20.5.

\textsuperscript{364} As we explained at the time we first adopted the PCS/cellular attribution rule, we decided to attribute ownership interests of 20 percent or more rather than 5 percent, due to the unique history of cellular licensing in which settlements of licensing disputes left many companies with non-controlling interests greater than 5 percent. We did not think it fair to exclude such companies from CMRS and so we raised the attribution threshold to 20 percent. \textit{See supra ¶ 119.}

under our rules. But these relaxed attribution rules present a situation entirely different from the 20 percent attribution rule. We have been charged expressly by Congress to ensure that small businesses, including businesses owned by women and minorities, and rural telephone companies are given meaningful opportunities to participate in the provision of wireless services.\textsuperscript{366} Our rules must also promote the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas.\textsuperscript{367} One of the most formidable barriers to such participation is the difficulty such businesses face in raising sufficient capital to compete in the highly capital-intensive wireless communications businesses. By increasing the attribution threshold for such designated entities and their investors, our goal was to make capital more readily available by reducing the number of investors such businesses must seek out. We also concluded that smaller entities that have some interests in cellular operations may be especially effective PCS competitors because of their cellular experience. This will help ensure that service is brought quickly to underserved areas and that designated entities become viable competitors. In particular, rural telephone companies and some small cellular companies, due to their existing infrastructure, are uniquely positioned rapidly to introduce PCS services into their service areas or adjacent areas.\textsuperscript{368}

124. However, we did not exempt small businesses and rural telephone companies entirely from the cellular eligibility rules because such an exemption could foreclose competition from a new PCS entrant. In maintaining the 45 MHz spectrum cap, we remain concerned that there is potential for some of these parties to compete less vigorously in the nascent PCS industry. While we recognize that our relaxation of the rules in favor of the CMRS spectrum cap presents a risk of lower than optimal competition, we must balance competing public policies and we believe that this is the proper balance to fulfill our various statutory mandates under Section 309(j) of the Communications Act.

125. Further, we decline to adopt a single majority shareholder exception for the CMRS spectrum cap rule as suggested by CBT and CTIA.\textsuperscript{369} As discussed above, economic theory indicates that an entity holding less than a majority interest may influence the CMRS market in an anticompetitive manner. In such circumstances, it makes no difference whether there is another shareholder that exercises control since significant minority ownership that does not convey control still poses a serious danger of hindering competition in a concentrated market such as CMRS. These same concerns arise with respect to other emerging services, and legislative and regulatory initiatives through which competition is being introduced to market segments that may not be highly competitive do not include a single majority shareholder exception. For example, we did not adopt a single majority shareholder exception for purposes of attributing ownership in


\textsuperscript{367} Id. at 309(j)(3)(A).

\textsuperscript{368} See Memorandum Opinion and Order, GEN Docket 90-314, 9 FCC Rcd 4957, 5007 (1994).

\textsuperscript{369} See CBT Comments at 4-6; CTIA Comments at 15.
the context of cable cross-ownership with video programmers, Multichannel Multipoint Distribution Service ("MMDS" or "wireless cable"), and Satellite Master Antenna Television Service ("SMATV" or "private cable"). Although we recognized that a single majority shareholder exception was a component of the broadcast attribution rules, we found that more inclusive rules were necessary to curb the incentives of cable operators to influence the behavior of their programming affiliates to the detriment of competitors, to prevent cable operators from "warehousing potential competition," to encourage alternative providers of multichannel video service, and to promote the development of local competition to established cable operators. These objectives are similar to those set forth above in support of a 45 MHz CMRS spectrum cap and CMRS ownership attribution rules. We note as another example that, in safeguarding competition with the entry of the monopoly Bell Operating Companies into long distance, equipment manufacturing and alarm monitoring, Congress did not provide for a single majority shareholder exception to the 1996 Act's new definition of "affiliate."  

126. We further note that, although the broadcast rules contain a single majority shareholder exception, broadcast services are also subject to the Commission's "cross-interest" policy. This policy is administered on a case-by-case basis and prohibits individuals from having "meaningful" interests in two broadcast stations, or a daily newspaper and a broadcast station, or a television station and a cable television system, when both outlets serve "substantially the same area." One "meaningful relationship" the policy covers involves an individual who has an attributable interest in one media outlet and a substantial nonattributable equity interest in another media outlet in the same market, including a minority stock interest in a corporation having a single majority shareholder. Thus, while under our rules a minority equity interest in a broadcast station is generally not attributable if there is a single majority stockholder, our cross-interest policy requires us to scrutinize such minority interests on a case-by-case basis to determine whether they "engender concerns about arms length competition and diversity in certain markets in which the interest holder also has an attributable interest in another outlet." If the Commission finds that such concerns do exist in a particular case, it may deem the minority interest a meaningful relationship and prohibit its acquisition.  

127. The principal distinction, then, between our CMRS ownership attribution rules and our broadcast rules is the presumption we apply in assessing whether a minority equity interest in

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374 Id. at 2036.
an entity with a single majority shareholder raises concerns such that the interest should nevertheless be attributed to the interest holder. Currently, in the broadcast context, we generally presume, under the single majority shareholder exception, that such interests should not be attributable, but under our cross-interest policy we still may find in individual cases that this presumption should not apply given the competition and diversity concerns the particular case may raise.375 In the CMRS context, for the reasons stated above, we believe as a general matter that there should be no single majority shareholder exception, but, as noted, we will allow non-controlling minority investors to seek waivers of the spectrum cap rule where the licensee is controlled by a single majority shareholder or controlling general partner. In view of the competitive situation in the CMRS market, described above, we believe that this distinction between our CMRS and broadcasting rules and procedures is justified.

128. Hence, we believe that, as a general matter, minority stock interests and limited partnership interests should be deemed attributable CMRS ownership interests even if a single holder (or group of affiliated holders) owns more than 50 percent of the outstanding stock or partnership equity or has voting control of the CMRS licensee. Nevertheless, we believe that there may be limited circumstances where the existence of a single majority shareholder (or a single, controlling general partner) may mitigate the competitive impact of common ownership and the ability of the non-controlling interest holder to influence the licensee. Accordingly, we will implement two less restrictive measures as an alternative to attributing ownership in such cases.

129. First, as we previously did with our cellular/PCS cross-ownership rule, we will allow parties with non-controlling, attributable interests in CMRS licensees to have an attributable (or controlling) interest in another CMRS application that would exceed the 45 MHz spectrum cap so long as certain post-licensing divestiture procedures are followed.376 A “non-controlling attributable interest” is one where the holder has less than a 50 percent voting interest and there is an unaffiliated single holder of a 50 percent or greater voting interest. This will allow interest holders in licensees with a single majority shareholder to obtain another CMRS license (or attributable interest therein) through an auction or other means, subject to the interest holder coming into compliance with our divestiture provisions within 90 days of grant of the conflicting license.

375 We note that we have recently sought comment in our pending broadcast attribution proceeding on restricting the availability of the single majority shareholder exception to our attribution rules, and have also sought comment on whether we should eliminate the cross-interest policy and instead rely solely on our attribution rules as the means of attributing interests that raise concerns. Broadcast Attribution Notice at 3632, 3642-49.

376 See 47 C.F.R. § 24.204(f).
130. Second, we will consider requests for waivers of the CMRS spectrum cap that make an affirmative showing that an otherwise attributable ownership interest should not be attributed to its holder because:

- The interest holder has less than a 50 percent voting interest and there is an unaffiliated single holder of a 50 percent or greater voting interest;
- The interest holder is not likely to affect the local market in an anticompetitive manner;
- The interest holder is not involved in operations of the licensee and does not have the ability to influence the licensee on a regular basis; and
- Grant of a waiver is in the public interest because the benefits of such common ownership to the public outweigh any potential for anticompetitive harm to the market.

131. Finally, we agree with GTE and DCR that retroactive application of any cross-ownership or spectrum cap rule changes would be contrary to the public interest:377 PCS licensees that participated in the A, B, and C block auctions have already incurred enormous expenses to, inter alia, design their systems, relocate incumbent users of the spectrum, acquire cell sites, and establish marketing plans.378 Retroactive application of our rules would disrupt this burgeoning industry and delay service to the public. Furthermore, entities that may have been precluded from participating in past auctions for CMRS spectrum based on our prior rules may now acquire additional spectrum through future auctions, assignments of licenses, transfers of control or investments.379 Thus, we conclude that any changes to our spectrum cap and cross-ownership rules will apply prospectively.

IV. Ownership Disclosure Provisions

132. Background. In the Notice, we noted that, during the course of previous broadband PCS auctions, it had become evident that certain ownership disclosure requirements found in our general PCS competitive bidding rules were burdensome and difficult to administer both at the short-form and long-form application stages. Moreover, requiring the submission of partnership

377 See GTE Comments at 9-10; DCR Reply Comments at 13 n.35.

378 See GTE Comments at 9.

379 The Commission not only plans to auction 30 MHz of broadband PCS spectrum in the D, E, and F blocks, but also has proposed to auction other broadband spectrum, such as cellular unserved areas and spectrum in the 800 MHz SMR pool. See, e.g., Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making, 11 FCC Rcd 1463 (1995). Assignments and transfers are subject to Section 310(d) of the Communications Act and the Commission's licensee eligibility rules and anti-trafficking restrictions. We relax the latter restrictions herein.
agreements proved sensitive because such agreements often contained strategic bidding information and other confidential data. Thus, we proposed to amend Section 24.813(a)(1) and Section 24.813(a)(2) of our rules to limit the information disclosure requirement with respect to outside ownership interests of applicants' attributable stockholders.\footnote{Notice at ¶ 81.} We proposed to require only the disclosure of attributable stockholders' direct, attributable ownership in other businesses holding or applying for CMRS or Private Mobile Radio Services ("PMRS") licenses.\footnote{Id.} In addition, we proposed to amend Section 24.813(a)(4) to delete the requirement that partnerships file a signed and dated copy of the partnership agreement with their short-form and long-form applications.\footnote{Id.} We also sought comment on whether we should further reduce the scope of information required by our general PCS rules at either the short-form or long-form filing stage, and on the alternative approach of requiring applicants to make their ownership documentation available upon request during or after the auction.

133. The number of waiver requests filed by applicants seeking permission to demonstrate gross revenues and total assets without audited financial statements in the C block auction led us also to propose changes to Section 24.720(f) and Section 24.720(g) of the Commission's Rules. We proposed to permit each applicant that does not otherwise use audited financial statements to provide a certification from its chief financial officer that the gross revenue and total asset figures that it provides in its short-form and long-form applications are true, full, and accurate; and that the applicant does not have the audited financial statements that are otherwise required under our rules. We also asked interested parties to suggest other alternatives to the audited financial statement requirement, and we sought comment on whether an alternative -- the one we proposed or any other -- should be available to all F block applicants, or only to applicants that do not otherwise use audited financial statements. In addition, we also requested comment on whether applicants should continue to be allowed to rely on either fiscal years or calendar years in providing their gross revenues, or whether they should instead base their size calculations on the most recent four quarters so that the Commission receives the most current information available.

134. Comments. A majority of the commenters support making our ownership disclosure requirements less onerous.\footnote{See PCS Coalition Comments at 18; U S West Comments at 1; Liberty Comments at 2-3; AirLink Comments at 17; Antigone Comments at 9; CTIA Comments at 3; NCMC Comments at 18; Mid-Plains Comments at 5; Western Comments at 33; Wireless 2000 Comments at 2; Western Reply Comments at 21-22.} Many of those who support streamlined requirements also support our proposal to amend Sections 24.813(a)(1) and 24.813(a)(2) to require the disclosure of only attributable stockholders' direct, attributable ownership in other businesses holding or applying for
CMRS or PMRS licenses. Devon asserts that applicants should not be required to identify all businesses in which an attributable investor has an interest greater than five percent if the business is unrelated to wireless communications services. Vanguard believes that more limited disclosure requirements should apply not only to "attributable stockholders," but also to officers, directors, and key management personnel. Sprint and NatTel both argue that F block applicants should be subject to the same ownership disclosure requirements as C block applicants. In this connection, Sprint contends that the requirements of Sections 24.813(a)(1), (2), and (4) of our rules should be waived for the short-form applications but that the information described in these provisions should be required in the long-form applications.

135. BellSouth and Mr. Harvey Leong oppose changing the ownership disclosure requirements. Full disclosure, argues BellSouth, will permit the identification of fronts and help to ensure the participation of only eligible bidders. BellSouth also notes that the information required in Section 24.813 of our rules allows applicants to secure detailed information about other applicants necessary for the development of comprehensive auction strategies and contingency plans. TPCS suggests that a bidder should identify all of its investors in order to receive its license and be required to forfeit the license if irregularities are found.

136. Several commenters agree that the partnership agreement filing requirement should be eliminated. The PCS Coalition believes that applicants should not have to disclose their partnership agreements if other information is provided that allows observers to accurately judge their size, affiliation, real parties in interest, ownership interests in CMRS licensees, and any agreements made concerning bidding strategy or future association with other telecommunications providers.

384 See AirLink Comments at 17; Antigone Comments at 9; NCMC Comments at 18; Mid-Plains Comments at 5; Western Comments at 33; WPCS Comments at 8.

385 Devon Comments at 15.

386 Vanguard Comments at 6.

387 NatTel Comments at 5; Sprint Comments at 6.

388 Sprint Comments at 6. See also DCR Comments at 16.

389 BellSouth Comments at 15; Leong Comments at 4.

390 BellSouth Comments at 15, n. 40.

391 TPCS Comments at 3.

392 AirLink Comments at 17; Mid-Plains Comments at 5; Western Comments at 33.

393 PCS Coalition Comments at 18-19.
137. All commenters addressing the question support allowing applicants to demonstrate financial size without audited financial statements. Commenters differ, however, on the issue of whether data from the most recent four quarters should be used to determine financial eligibility. TEC argues that year-end data should be used because companies that use audited financial statements would not normally be audited on a quarterly basis and those that do not use auditors are unlikely to "close" their books quarterly. Accurate, verifiable data from the current fiscal year, TEC argues, would therefore be logistically difficult to obtain. NCMC, on the other hand, asserts that applicants should be able to base their gross revenue calculations on data from the most recent four quarters and their total assets on information available at the time the short form is filed. DCR requests clarification on how any rule changes would affect C block applicants. Finally, AirLink requests that we permit confidential information to be filed separately, either on paper or in a separate electronic filing accessible only by the Commission and the bidder, to prevent inadvertent release of confidential information.

138. Decision. We adopt our proposal to amend Section 24.813(a)(1) and Section 24.813(a)(2) of our rules to limit the information disclosure requirement with respect to outside ownership interests of applicants' attributable stockholders. We will require only the disclosure of attributable stockholders' direct, attributable ownership in other businesses holding or applying for CMRS or PMRS licenses. We agree with the commenters that the more extensive ownership disclosure requirements in our general PCS competitive bidding rules are burdensome and difficult to administer. We believe that these more limited requirements will continue to ensure participation of only eligible bidders. We also adopt our proposal to amend Section 24.813(a)(4) to delete the requirement that partnerships file a signed and dated copy of their partnership agreement with their short-form and long-form applications. We have found this requirement to be overly burdensome and are concerned that confidential or strategic bidding information could be unnecessarily disclosed through submissions of such agreements.

139. We also adopt the changes that we proposed to Section 24.720(f) and Section 24.720(g) of our rules. As a result, each applicant that does not otherwise use audited financial statements will be permitted to provide a certification from its chief financial officer that the gross

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394 PCS Coalition Comments at 18; AirLink Comments at 17; Antigone Comments at 9; CTIA Comments at 3 n. 5; TEC Comments at 15; Vanguard Comments at 7; DCR Comments at 8; NatTel Comments at 5; NCMC Comments at 18; Western Comments at 35; Wireless 2000 Comments at 2; WPCS Comments at 7.

395 TEC Comments at 16; see also WPCS Comments at 8.

396 Id.

397 NCMC Comments at 18.

398 DCR Comments at 7-8.

399 AirLink Comments at 18.

400 See Antigone Comments at 9; Liberty Comments at 2-3.
revenue and total asset figures indicated in its short-form and long-form applications are true, full, and accurate; and, that the applicant does not have the audited financial statements that are otherwise required under our rules. We believe the requirement of using audited financial statements to be unnecessarily burdensome, especially for small businesses that do not normally rely on such statements.401

140. Finally, we amend our rules to require that the information supplied by applicants for the F block is current. Specifically, an applicant's determination of average gross revenues will be based on the three most recently completed fiscal or calendar years. With regard to AirLink's concerns about inadvertent release of confidential data, we will require that confidential data be filed separately on paper. Similarly, any requests that information be treated as confidential will not be accepted electronically and must otherwise comply with our rules governing confidential treatment of documents.402

V. Auction Schedule

141. Background. We tentatively concluded in the Notice that we should auction the D, E, and F blocks concurrently, and we sought comment on conducting two separate simultaneous multiple round auctions -- one for the D and E block licenses and one for the F block licenses. In doing so, we noted that comments filed in response to an earlier inquiry into this issue indicated that simultaneous access to all the 10 MHz licenses is important to the plans of some prospective PCS providers and that auctioning the D and E licenses together in one auction and the F block licenses in a separate auction would accommodate the difference in eligibility requirements for the F block auction.403

142. Comments. Most commenters addressing this issue support auctioning the D, E, and F block licenses at the same time.404 However, the commenters differ as to whether we should conduct a single auction for all three blocks or two separate auctions as discussed in the Notice. Phoenix, TEC, PersonalConnect, BellSouth, Auction Strategy, Devon, NatTel,

401 See TEC Comments at 15.


403 Notice at ¶ 84.

404 See PCS Coalition Comments at 16-17; AirLink Comments at 17; Antigone Comments at 7; Point Comments at 3; USIW Comments at 3-4; The Alliance Comments at 11; Phoenix Comments at 4; TEC Comments at 16-17; PersonalConnect Comments at 1-2; Vanguard Comments at 7; Conestoga Comments at 3; DCR Comments at 10; AT&T Comments at 6-7; BellSouth Comments at 16; Auction Strategy Comments at 4; Devon Comments at 16; GTE Comments at 13; Gullstream Comments at 5; Iowa Comments at 6; Mountain Solutions Comments at 12; NatTel Comments 5-6; NextWave Comments at 2; NCMC Comments at 19; Omnipoint Comments at 6; Spectrum Resources, Inc. Comments at 1 ("Spectrum Resources"); PCIA Comments at 15; Wireless 2000 Comments at 2.
NextWave, NCMC and Omnipoint support a single auction.\textsuperscript{405} Their arguments in support of a single auction include: the D, E, and F block licenses are interdependent, which leads many applicants to seek to aggregate three licenses in a single market;\textsuperscript{406} a single auction would be less costly and less burdensome to administer for both bidders and the Commission;\textsuperscript{407} a single auction would help to ensure that the bids received for similar licenses will be more consistent than the bids received from the separately conducted A and B block auction and the C block auction;\textsuperscript{408} and, finally, a single auction would ensure that small businesses are given a legitimate opportunity to compete for not only F block licenses, but D and E block licenses as well.\textsuperscript{409}

143. AT&T, Iowa, and Mountain Solutions support the use of a single, consolidated auction only under certain conditions.\textsuperscript{410} AT&T contends that as long as the F block auction is not open to all bidders, it should be conducted separately.\textsuperscript{411} AT&T believes that F block bidders should be allowed to bid in the D and E block auctions, but should be required to file separate applications and upfront payments for the D and E block auction in order to ensure that they exhibit bona fide interest in those licenses and are not just attempting to inflate the prices paid for D and E block licenses.\textsuperscript{412} Iowa and Mountain Solutions would support a single auction if the Commission elects to set aside the D, E, and F blocks for small businesses only.\textsuperscript{413}

144. AirLink, GTE, and Conestoga believe that the Commission should conduct two separate, but concurrent, auctions for the D and E blocks and the F block.\textsuperscript{414} AirLink argues that a single auction would be administratively complex.\textsuperscript{415} GTE believes that separate auctions make the most sense considering the difference in eligibility rules and the possibility of delay caused by

\textsuperscript{405} Phoenix Comments at 4; TEC Comments at 16-17; PersonalConnect Comments at 1-2; BellSouth Comments at 16; Auction Strategy Comments at 4; Devon Comments at 16; NatTel Comments at 5-6; NextWave Comments at 2; NCMC Comments at 19; and Omnipoint Comments at 6.

\textsuperscript{406} Phoenix Comments at 4; BellSouth Comments at 16; Auction Strategy Comments at 4; NextWave Comments at 2.

\textsuperscript{407} NextWave Comments at 2; Devon Comments at 16.

\textsuperscript{408} TEC Comments at 16-17; PersonalConnect Comments at 1-2; Auction Strategy Comments at 4.

\textsuperscript{409} PersonalConnect Comments at 1-2; Auction Strategy Comments at 4; NextWave Comments at 2.

\textsuperscript{410} AT&T Comments at 6-7; Iowa Comments at 6-7; Mountain Solutions Comments at 12-13.

\textsuperscript{411} AT&T Comments at 6-7.

\textsuperscript{412} \textit{Id.} at 7.

\textsuperscript{413} Iowa Comments at 6-7; Mountain Solutions Comments at 12-13.

\textsuperscript{414} AirLink Comments at 17; GTE Comments at 13; Conestoga Comments at 3.

\textsuperscript{415} AirLink Comments at 17.
legal challenges to the F block auction or to the D and E block auction.\textsuperscript{416}

145. A number of other commenters oppose auctioning the D, E, and F blocks at the same time.\textsuperscript{417} Sprint and New Dakota believe that the F block licenses should be auctioned after the D and E block licenses, which would give the F block bidders additional time to form partnerships with unsuccessful bidders in the D and E block auction, as well as with other entities, and the opportunity to gain valuable information concerning the values of 10 MHz licenses.\textsuperscript{418} Sprint also argues that if the F block licenses were auctioned simultaneously with the D and E blocks, F block bidders could bid up the prices of the licenses in the D and E blocks in order to raise the costs of non-designated entities.\textsuperscript{419} In contrast, WPCS and RAA believe that the F block should be auctioned before the D and E blocks to eliminate any "headstart" non-entrepreneurs already have and prevent "last chance" or "desperation" bidding, which would drive prices to unrealistically high levels.\textsuperscript{420} New Dakota and Radiofone assert that auctioning each of the blocks separately would give small businesses a better opportunity to compete for single 10 MHz licenses.\textsuperscript{421} GWI and PCS One contend that a single auction effectively would be creating another 30 MHz auction, which would skew the financial markets' view of the D, E, and F blocks at the expense of C block winners and foreclose participation by small businesses.\textsuperscript{422} Mid-Plains urges the Commission to conduct sequential auctions because small businesses would be better able to assess the financial resources required in each subsequent auction as measured against the results of the previous auction.\textsuperscript{423}

146. We received a number of other comments regarding the timing of the D, E, and F block auctions. Most of these comments urged us to conduct the auctions as expeditiously as possible in order to ensure that D, E, and F block licensees are not at a significant disadvantage in comparison to A, B, and C block licensees.\textsuperscript{424} Others claim that the Commission should ensure that there is a sufficient amount of time between the close of the C block auction and the

\textsuperscript{416} GTE Comments at 13.

\textsuperscript{417} Sprint Comments at 8; Radiofone Comments at 6; GWI Comments at 5-6; Mid-Plains Comments at 6; PCS One Comments at 2; RAA Comments at 7; New Dakota Comments at 4-5; WIDS Comments at 1; APC Reply Comments at 7, n.12.

\textsuperscript{418} Sprint Comments at 8; New Dakota Comments at 4-5. See also APC Reply Comments at 7 n. 12.

\textsuperscript{419} Sprint Comments at 8-9.

\textsuperscript{420} WPCS Comments at 8; RAA Comments at 7 and Reply Comments at 3. See also Columbia Comments at 2.

\textsuperscript{421} New Dakota Comments at 3-4; Radiofone Comments at 6.

\textsuperscript{422} GWI Comments at 5-6; PCS One Comments at 2.

\textsuperscript{423} Mid-Plains Comments at 6.

\textsuperscript{424} See Iowa Comments at 7; U S West Comments at 5-6; Gulfstream Comments at 5-6; KMTel Comments at 8; PCIA Reply Comments at 8-9.
commencement of the D, E, and F block auctions. U S West argues that if the Commission ultimately decides to use a single auction, it should preserve the option of conducting separate auctions so that a legal challenge to the auction of one license block does not delay the auction of the other license blocks.

147. **Decision.** We agree with the majority of the commenters that we should auction the D, E, and F blocks at the same time. We also intend to auction the D, E, and F blocks in a single auction. We believe that auctioning the three blocks in one simultaneous multiple round auction will benefit bidders by reducing administrative inefficiencies and by providing maximum flexibility for bidders to choose between similar licenses. While some commenters oppose a single auction because it would be too complex, we believe that if we use uniform upfront payments, which we adopt for the three blocks in this Order, we will reduce the complexity of a single auction. We also believe that this method will expedite service to the public. Many of the commenters that oppose a single auction offer plans for sequencing the auctions. Such an approach, in our view, would delay the licensing of some of the 10 MHz blocks and, thus, delay service to the public. Although we believe that a single auction is the best option, we delegate authority to the Wireless Telecommunications Bureau to conduct one auction for the D and E blocks and one for the F block concurrently if such an approach is operationally necessary or otherwise furthers the public interest. While we believe that it is important to auction the D, E, and F block licenses at the same time, we also believe that it is vital to ensure that the public receives the benefit of these new services as quickly as possible.

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425 *See* DCR Comments at 11; NatTel Comments at 6.

426 US West Comments at 7.
VI. Other Issues

A. Limit on Licenses Acquired at Auction

148. Even though the issue was not raised in the Notice, several commenters suggest that we modify our limitation on the number of licenses that a single entity may acquire at auction to ensure wide distribution of entrepreneurs' block licenses. In the Competitive Bidding Fifth Report and Order, we imposed a limit on the number of licenses within the entrepreneurs' blocks that a single entity may win at auction. We took care not to impose a restriction that would prevent applicants from obtaining a sufficient number of licenses to create large and efficient regional services. We provided that a single entity may win no more than 10 percent of the licenses available in the entrepreneurs' blocks; these licenses may all be C block licenses or F block licenses or some combination of the two.\textsuperscript{427} In this proceeding, several commenters propose that we change this limitation to one based on population rather than on the number of licenses. AirLink proposes a population cap of 27 million.\textsuperscript{428} NCMC proposes a population cap of 20 percent of the population served by all C and F block licenses.\textsuperscript{429}

149. We decline to modify our rule as requested by commenters. First, we believe that the results of the C block auction indicate that entrepreneurs' block licenses were disseminated to a large number of auction winners. In that auction, almost 90 entrepreneurs won 493 licenses. Second, bidding strategies in the C block auction and the business plans of many firms may have been formulated in reliance on this rule. We find no basis for modifying it here.

B. Partitioning and Disaggregation

150. Numerous commenters argue that the Commission's geographic partitioning provisions, which currently apply only to rural telephone companies,\textsuperscript{430} should be expanded to include broadband PCS licensees and spectrum disaggregation should be permitted in the near term.\textsuperscript{431} Under the current rules, broadband PCS licensees may disaggregate licensed broadband PCS spectrum after January 1, 2000, if they have met the five-year construction requirement.\textsuperscript{432} Because the issues of partitioning and disaggregation exceed the scope of this proceeding, we will

\textsuperscript{427} 47 C.F.R. § 24.710.

\textsuperscript{428} AirLink Comments at 6-7. See also RAA Reply Comments at 3; PersonalConnect Reply Comments at 3.

\textsuperscript{429} NCMC Reply Comments at 8 n. 16.

\textsuperscript{430} See 47 C.F.R. § 24.714.

\textsuperscript{431} See AT&T Comments at 11-12; ICGC Comments at 3-4; Integrated Voice Systems Comments at 2 ("IVS"); ONE Comments at 1; PCS One Comments at 2; Western Comments at 27; BellSouth Reply Comments at 7; TDS Reply Comments at 5-6; NextWave Reply Comments at 7-8; Cox Reply Comments at 4-5 n. 9; PersonalConnect Reply Comments at 4; Columbia Comments at 2; US West Reply Comments at 5; Western Reply Comments at 15.

\textsuperscript{432} 47 C.F.R. § 24.229(d).
consider these issues in a separate proceeding.

C. Bid Withdrawal

151. Auction Strategy asserts that our procedures should be enhanced to reduce the possibility of mistaken bids. It suggests that the bid submission software should warn bidders whenever a bid is entered that exceeds the minimum bid by more than 10 bid increments. We agree with Auction Strategy's suggestion that we take further steps to reduce the possibility of mistaken bids. For the D, E, and F block auction, the Wireless Telecommunications Bureau will employ an additional procedure that will warn bidders of the possibility of a mistaken bid.

152. Auction Strategy also states that since we cannot distinguish honest mistakes from strategic mistakes, we should impose a penalty for mistaken bids and proposes a penalty for such bids. Our rules provide for a bid withdrawal payment that is equal to the difference between the withdrawn bid amount and the amount of the subsequent winning bid, if the subsequent winning bid is lower. No withdrawal payment is assessed if the subsequent winning bid exceeds the withdrawn bid. We recently addressed the issue of how this bid withdrawal payment applies to bids that are mistakenly placed and withdrawn in a decision involving two bidders in the 900 MHz SMR and broadband PCS C block auctions.

153. In Atlanta Trunking, we stated that, while we believe that in some cases full application of the bid withdrawal payment provisions could impose an extreme and unnecessary hardship on bidders, it may be extremely difficult for the Commission to distinguish between "honest" erroneous bids and "strategic" erroneous bids. We held that in cases of erroneous bids, some relief from the bid withdrawal payment requirement appears necessary. Accordingly, we fashioned the following guidelines to be followed when addressing individual requests for waiver of withdrawal payments: If a mistaken bid is withdrawn in the round immediately following the round in which it was submitted, and the auction is in Stage I or Stage II, the withdrawal payment should be the greater of (a) two times the minimum bid increment during the round in which the mistaken bid was submitted or (b) the standard withdrawal payment calculated as if the bidder had made a bid at one bid increment above the minimum accepted bid. If the mistaken bid is withdrawn two or more rounds following the round in which it was submitted, the bidder should not be eligible for any reduction in the bid withdrawal payment. Similarly, during Stage III of an auction, if a mistaken bid is not withdrawn during the round in which it was submitted, the bidder should not be eligible for any reduction in the bid withdrawal payment. We believe that under this

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433 Auction Strategy Comments at 5.


435 See 47 C.F.R. §§ 1.2104(g)(1) and 24.704(a)(1).

approach, the required bid withdrawal payment would be substantial enough to discourage strategic placement of erroneous bids without being so severe as to impose an untenable burden on bidders. Thus, we adopt this approach for the D, E, and F block auction.

VII. Conclusion

154. In this Order, we conclude that making our broadband PCS F block rules race- and gender-neutral will avoid the uncertainty and delay that could result from legal challenges to the special provisions for minority- and women-owned businesses in these rules. We also take steps to streamline our procedures and minimize the possibility of insincere bidding and bidder default. We also respond to the Cincinnati Bell remand issues. Finally, to expedite the delivery of broadband PCS services to the public, we plan to offer the D, E, and F block licenses together in one simultaneous multiple round auction and delegate authority to the Wireless Telecommunications Bureau to conduct two concurrent auctions if circumstances warrant.

VIII. Procedural Matters and Ordering Clauses


156. IT IS ORDERED that the rule changes specified in Appendix B ARE ADOPTED and are EFFECTIVE 30 days after publication in the Federal Register.

157. IT IS FURTHER ORDERED that the Wireless Telecommunications Bureau is DELEGATED AUTHORITY to decide waiver requests pertaining to our F block competitive bidding rules; to modify the upfront payment for reauctioning C block licenses; and to decide whether or not to conduct multiple auctions for the D, E, and F block licenses.
158. This action is taken pursuant to Sections 4(i), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r) and 309(j).

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary
APPENDIX A

HYPOTHETICAL HERFINDAHL-HIRSCHMAN INDICES

1. Industry Without Spectrum Caps

A: Pure Duopoly -- Two Cellulurs @ 25 MHz.

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B: Modified Duopoly -- Add One SMR @ 10 Mhz.

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C: Atomized Market -- Two cellualrs @ 25 MHz, three PCS @ 30, three PCS @ 10, one SMR @ 10.

**HHI is 1343**

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D: Deployment of PCS Without Spectrum Caps: Scenario #1 -- Each Cellular Acquires 60 MHz of broadband PCS Spectrum.

**HHI is 4491**

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E: Deployment of PCS Without Spectrum Caps: Scenario #2 -- Each Cellular Acquires 40 MHz of broadband PCS Spectrum, a New Entrant Acquires 40 MHz, SMR @ 10 MHz.

**HHI is 3133**

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<td>100</td>
<td>3132.716</td>
</tr>
</tbody>
</table>
2. Concentrations Possible Under Three-Cap Regime

A: All Three 10 MHz PCS Blocks Go to One New PCS Licensee (Two cellualrs @ 25, four PCS @ 30 MHz, one SMR @ 10).

**HHI is 1528**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>MHz</th>
<th>Market Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular A</td>
<td>25</td>
<td>13.88888889</td>
<td>192.9012</td>
</tr>
<tr>
<td>Cellular B</td>
<td>25</td>
<td>13.88888889</td>
<td>192.9012</td>
</tr>
<tr>
<td>PCS A 30</td>
<td>16.66666667</td>
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<td></td>
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<tr>
<td>PCS B 30</td>
<td>16.66666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
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<tr>
<td>PCS D</td>
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<td>16.66666667</td>
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<tr>
<td>Big SMR</td>
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<td>5.555555556</td>
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<tr>
<td>Total</td>
<td>180</td>
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<td>1527.778</td>
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</table>

B: Each Cellular Gets One 10 MHz Block, the Third Remains Solo (Two cellualrs @ 35, three PCS @ 30, one PCS @ 10, one SMR @ 10).

**HHI is 1651**

<table>
<thead>
<tr>
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<th>MHz</th>
<th>Market Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular A</td>
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<td>Cellular B</td>
<td>35</td>
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<tr>
<td>PCS A 30</td>
<td>16.66666667</td>
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<tr>
<td>PCS B 30</td>
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<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>PCS C 30</td>
<td>16.66666667</td>
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<tr>
<td>PCS D</td>
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</tr>
<tr>
<td>Big SMR</td>
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<td>5.555555556</td>
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</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td>1651.235</td>
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</table>
C: Each Cellular Gets One 10 MHz Block, a 30 MHz PCS Licensee Gets the Third (2 cellulars @ 35, one PCS @ 40, two PCS @ 30, one SMR @ 10).

**HHI is 1836**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>MHz</th>
<th>Market Share</th>
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<tr>
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<tr>
<td>PCS A 40</td>
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<td>493.8272</td>
<td></td>
</tr>
<tr>
<td>PCS B 30</td>
<td>16.666666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>PCS C 30</td>
<td>16.666666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>Big SMR</td>
<td>10</td>
<td>5.5555555556</td>
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<tr>
<td>Total</td>
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</table>

D: The Three 10 MHz PCS Blocks Go to One Cellular Carrier and Two of the PCS Carriers (One cellular @ 35, one cellular @ 25 MHz, two PCS @ 40 MHz, one PCS @ 30, one SMR @ 10).

**HHI is 1867**

<table>
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<tr>
<th>Competitor</th>
<th>MHz</th>
<th>Market Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular A</td>
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<tr>
<td>Cellular B</td>
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<td>192.9012</td>
</tr>
<tr>
<td>PCS A 40</td>
<td>22.222222222</td>
<td>493.8272</td>
<td></td>
</tr>
<tr>
<td>PCS B 40</td>
<td>22.222222222</td>
<td>493.8272</td>
<td></td>
</tr>
<tr>
<td>PCS C 30</td>
<td>16.666666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>Big SMR</td>
<td>10</td>
<td>5.5555555556</td>
<td>30.8642</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td>1867.284</td>
</tr>
</tbody>
</table>

E: Each 30 MHz PCS Licensee Gets One of the 10 MHz Blocks (Two cellulars @ 25, three PCS @ 40, one SMR @ 10).

**HHI is 1898**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>MHz</th>
<th>Market Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular A</td>
<td>25</td>
<td>13.8888888889</td>
<td>192.9012</td>
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<tr>
<td>Cellular B</td>
<td>25</td>
<td>13.8888888889</td>
<td>192.9012</td>
</tr>
<tr>
<td>PCS A 40</td>
<td>22.222222222</td>
<td>493.8272</td>
<td></td>
</tr>
<tr>
<td>PCS B 40</td>
<td>22.222222222</td>
<td>493.8272</td>
<td></td>
</tr>
<tr>
<td>PCS C 40</td>
<td>22.222222222</td>
<td>493.8272</td>
<td></td>
</tr>
<tr>
<td>Big SMR</td>
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<td>5.5555555556</td>
<td>30.8642</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
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<td>1898.148</td>
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</tbody>
</table>
3. Concentrations Possible Under Only the 45 MHz Cap

A: One Cellular Gets Two PCS 10 MHz Blocks, the Other Cellular Gets One (One cellular @ 45, one cellular @ 35, three PCS @ 30, one SMR @ 10).

**HHI is 1867**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>MHz</th>
<th>Market Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular A</td>
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<td>25</td>
<td>625</td>
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<tr>
<td>Cellular B</td>
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<tr>
<td>PCS A 30</td>
<td>16.66666667</td>
<td>277.7778</td>
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</tr>
<tr>
<td>PCS B 30</td>
<td>16.66666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>PCS C 30</td>
<td>16.66666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>Big SMR</td>
<td>10</td>
<td>5.5555555556</td>
<td>30.8642</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td>1867.284</td>
</tr>
</tbody>
</table>

B: One Cellular Gets Two PCS 10 MHz Blocks, the Other 10 MHz PCS Block Goes to One of the PCS 30 MHz Licensees (One cellular @ 45, one cellular @ 25, one PCS @ 40, two PCS @ 30, one SMR @ 10).

**HHI is 1898**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>MHz</th>
<th>Market Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellular A</td>
<td>45</td>
<td>25</td>
<td>625</td>
</tr>
<tr>
<td>Cellular B</td>
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<td>13.88888889</td>
<td>192.9012</td>
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<tr>
<td>PCS A 40</td>
<td>22.22222222</td>
<td>493.8272</td>
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</tr>
<tr>
<td>PCS B 30</td>
<td>16.66666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>PCS C 30</td>
<td>16.66666667</td>
<td>277.7778</td>
<td></td>
</tr>
<tr>
<td>Big SMR</td>
<td>10</td>
<td>5.5555555556</td>
<td>30.8642</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td>1898.148</td>
</tr>
</tbody>
</table>
General Assumptions:

(1) the relevant product market is mobile two-way voice communications service. In this market, the competitors are the licensees for cellular service and broadband PCS, and the largest interconnected SMR.

(2) allocated spectrum is the measurement of competitive significance in the market, with no modifications to reflect efficient and inefficient uses or technologies (analog vs. digital, etc.).
APPENDIX B

FINAL RULES

Parts 20 and 24 of Chapter I of Title 47 of the Code of Federal Regulations are amended as follows:

PART 20 - COMMERCIAL MOBILE RADIO SERVICES

1. The authority citation for Part 20 continues to read as follows:

AUTHORITY: Secs. 4, 303, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. §§ 154, 303, and 332, unless otherwise noted.

2. Section 20.6 is amended by revising paragraphs (d)(2), (e), and note 1 to read as follows:

§ 20.6 CMRS spectrum aggregation limit.

* * * *

(d) * * *

(2) Partnership and other ownership interests and any stock interest amounting to 20 percent or more of the equity, or outstanding stock, or outstanding voting stock of a broadband PCS, cellular or SMR licensee shall be attributed, except that ownership will not be attributed unless the partnership and other ownership interests and any stock interest amount to at least 40 percent of the equity, or outstanding stock, or outstanding voting stock of a broadband PCS, cellular or SMR licensee if the ownership interest is held by a small business or a rural telephone company, as these terms are defined in § 1.2110 of this chapter or other related provisions of the Commission's rules, or if the ownership interest is held by an entity with a non-controlling equity interest in a broadband PCS licensee or applicant that is a small business.

* * * *

(e) Divestiture. (1) Any party holding controlling or attributable ownership interests in broadband PCS, cellular, and/or SMR licensees regulated as CMRS providers that would exceed the spectrum aggregation limitation defined in paragraph (a) of this section, if granted additional licenses, may be a party to a broadband PCS, cellular, or SMR application (i.e., have a controlling or attributable interest in the applicant), and such applicant will be eligible for licenses amounting to more than 45 MHz of broadband PCS, cellular, and/or SMR spectrum regulated as CMRS in a geographical area, pursuant to the divestiture procedures set forth in paragraphs (e)(2) through (e)(4) of this section; provided, however, that in the case of parties holding controlling or attributable ownership interests in broadband PCS, cellular, and/or SMR licensees, these divestiture procedures shall be available only to:

(i) Parties with controlling or attributable ownership interests in broadband PCS, cellular, and/or SMR licenses where the geographic license areas cover 20 percent or less of the applicant's service area population;
(ii) Parties with attributable interests in broadband PCS, cellular, and/or SMR licenses solely due to management agreements or joint marketing agreements; and

(iii) Parties with non-controlling attributable interests in broadband PCS, cellular, and/or SMR licenses, regardless of the degree to which the geographic license areas cover the applicant's service area population. For purposes of this paragraph, a "non-controlling attributable interest" is one in which the holder has less than a fifty (50) percent voting interest and there is an unaffiliated single holder of a fifty (50) percent or greater voting interest.

(2) The applicant for a license that, if granted, would exceed the 45 MHz limitation shall certify on its application that it and all parties to the application will come into compliance with this limitation.

(3) If such an applicant is a successful bidder in an auction, it must submit with its long-form application a signed statement describing its efforts to date and future plans to come into compliance with the 45 MHz spectrum limitation. A similar statement must also be included with any application for assignment of licenses or transfer of control that, if granted, would exceed the spectrum aggregation limit.

(4) If such an applicant is otherwise qualified, its application will be granted subject to a condition that the licensee shall come into compliance with the 45 MHz spectrum limitation within ninety (90) days of final grant.

(i) Parties holding controlling interests in broadband PCS, cellular, and/or SMR licensees that conflict with the attribution threshold or geographic overlap limitations set forth in this section will be considered to have come into compliance if they have submitted to the Commission an application for assignment of license or transfer of control of the conflicting licensee (see §§ 24.839 of this chapter (PCS), 22.39 of this chapter (cellular), 90.158 of this chapter (SMR)) by which, if granted, such parties no longer would have an attributable interest in the conflicting license. If no such assignment or transfer application is tendered to the Commission within ninety (90) days of final grant of the initial license, the Commission may consider the certification and the divestiture statement to be material, bad faith misrepresentations and shall invoke the condition on the initial license or the assignment or transfer, cancelling or rescinding it automatically, shall retain all monies paid to the Commission, and, based on the facts presented, shall take any other action it may deem appropriate. Divestiture may be to an interim trustee if a buyer has not been secured in the required period of time, as long as the applicant has no interest in or control of the trustee, and the trustee may dispose of the license as it sees fit.

(ii) Where parties to broadband PCS, cellular, or SMR applications hold less than controlling (but still attributable) interests in broadband PCS, cellular, or SMR licensee(s), they shall submit, within ninety (90) days of final grant, a certification that the applicant and all parties to the application have come into compliance with the limitations on spectrum aggregation set forth in this section.

Note 1 to paragraph (d): Waivers of Section 20.6(d) may be granted upon an affirmative showing:

(1) That the interest holder has less than a 50 percent voting interest in the licensee and there is an unaffiliated single holder of a 50 percent or greater voting interest;
(2) That the interest holder is not likely to affect the local market in an anticompetitive manner;

(3) That the interest holder is not involved in the operations of the licensee and does not have the ability to influence the licensee on a regular basis; and

(4) That grant of a waiver is in the public interest because the benefits to the public of common ownership outweigh any potential anticompetitive harm to the market.

* * * * *

PART 24 - PERSONAL COMMUNICATIONS SERVICES

3. The authority citation for Part 24 continues to read as follows:

AUTHORITY: Secs. 4, 301, 302, 303, 309 and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. §§ 154, 301, 302, 303, 309 and 332, unless otherwise noted.

4. Section 24.204 is removed.

5. Section 24.229 is amended by removing paragraph (c) and redesignating paragraph (d) as paragraph (c) and revising it to read as follows.

§ 24.229 Frequencies.

* * * * *

(c) After January 1, 2000, licensees that have met the 5-year construction requirement may assign portions of licensed PCS spectrum.

6. Section 24.704 is amended by adding paragraph (a)(3) to read as follows:

§ 24.704 Withdrawal, default and disqualification penalties.

(a) * * *

(3) **Erroneous Bids.** If at any point during an auction an erroneous bid is withdrawn in the same round in which it was submitted, the bid withdrawal payment will be the greater of

(i) The minimum bid increment for that license and round; and

(ii) The standard bid withdrawal payment, as defined in paragraph (a)(1) of this section, calculated as if the bidder had made the minimum accepted bid. If an erroneous bid is withdrawn in the round immediately following the round in which it was submitted, and the auction is in Stage I or Stage II, the withdrawal payment will be the greater of
(A) Two times the minimum bid increment during the round in which the erroneous bid was submitted, and
(B) The standard withdrawal payment, as defined in paragraph (a)(1) of this section, calculated as if the bidder had made a bid one bid increment above the minimum accepted bid. If an erroneous bid is withdrawn two or more rounds following the round in which it was submitted, the bidder will not be eligible for any reduction in the bid withdrawal payment as defined in paragraph (a)(1) of this section. During Stage III of an auction, if an erroneous bid is not withdrawn during the round in which it was submitted, the bidder will not be eligible for any reduction in the bid withdrawal payment as defined in paragraph (a)(1) of this section.

***

7. Section 24.706 is revised to read as follows:

§ 24.706 Submission of upfront payments and down payments.

(a) Where the Commission uses simultaneous multiple round auctions or oral sequential auctions, bidders will be required to submit an upfront payment in accordance with § 1.2106 of this chapter, paragraph (c) of this section, and §§ 24.711(a)(1) and 24.716(a)(1).
(b) Winning bidders in an auction must submit a down payment to the Commission in accordance with § 1.2107(b) of this chapter and §§ 24.711(a)(2) and 24.716(a)(2).
(c) Each eligible bidder for licenses on frequency Blocks D and E subject to auction shall pay an upfront payment of $0.06 per MHz per pop for the maximum number of licenses (in terms of MHz-pops) on which it intends to bid pursuant to § 1.2106 of this chapter and procedures specified by Public Notice.

8. Section 24.709 is amended by revising the section heading and amending paragraphs (a)(1), (a)(2), (c)(1) and (c)(2) to read as follows:

§ 24.709 Eligibility for licenses for frequency Blocks C and F.

(a) General Rule.
(1) No application is acceptable for filing and no license shall be granted for frequency block C or frequency block F, unless the applicant, together with its affiliates and persons or entities that hold interests in the applicant and their affiliates, have gross revenues of less than $125 million in each of the last two years and total assets of less than $500 million at the time the applicant’s short-form application (Form 175) is filed.
(2) The gross revenues and total assets of the applicant (or licensee), and its affiliates, shall be attributed to the applicant and considered on a cumulative basis and aggregated for purposes of determining whether the applicant (or licensee) is
eligible for a license for frequency block C or frequency block F under this section.

* * * * *

(c)* * *

(1) *Short-form Application.* In addition to certifications and disclosures required by Part 1, subpart Q of this Chapter and § 24.813, each applicant for a license for frequency block C or frequency block F shall certify on its short-form application (Form 175) that it is eligible to bid on and obtain such license(s), and (if applicable) that it is eligible for designated entity status pursuant to this section and § 24.720, and shall append the following information as an exhibit to its Form 175:

* * * * *

(2) *Long-form Application*  In addition to the requirements in subpart I of this part and other applicable rules (e.g., §§ 20.6(e) and 20.9(b) of this chapter), each applicant submitting a long-form application for a license(s) for frequency block C or frequency block F shall, in an exhibit to its long-form application:

* * * * *

(ii) List and summarize all agreements or other instruments (with appropriate references to specific provisions in the text of such agreements and instruments) that support the applicant’s eligibility for a license(s) for frequency block C or frequency block F and its eligibility under §§ 24.711, 24.712, 24.714 and 24.720, including the establishment of *de facto* and *de jure* control; such agreements and instruments include articles of incorporation and bylaws, shareholder agreements, voting or other trust agreements, partnership agreements, management agreements, joint marketing agreements, franchise agreements, and any other relevant agreements (including letters of intent), oral or written; and

* * * * *

9. Section 24.715 is removed.

10. Section 24.716 is amended by revising paragraphs (a)(1), (a)(2), (b), redesignating paragraph (c) as paragraph (d); revising newly-redesignated paragraph (d)(2); and adding a new paragraph (c) to read as follows:

§ 24.716 Upfront payments, down payments, and installment payments for licenses for frequency Block F.

(a) * * *
(1) Each eligible bidder for licenses on frequency Block F subject to auction shall pay an upfront payment of $0.06 per MHz per pop for the maximum number of licenses (in terms of MHz-pops) on which it intends to bid pursuant to § 1.2106 of this chapter and procedures specified by Public Notice;

(2) Each winning bidder shall make a down payment equal to 20 percent of its winning bid (less applicable bidding credits); a winning bidder shall bring its total amount on deposit with the Commission (including upfront payment) to 10 percent of its net winning bid within five business days after the auction closes, and the remainder of the down payment (10 percent) shall be paid within five business days after the application required by § 24.809(b) is granted; and

(b) Installment Payments. Each eligible licensee of frequency Block F may pay the remaining 80 percent of the net auction price for the license in installment payments pursuant to § 1.2110(e) of this Chapter and under the following terms:

(1) For an eligible licensee with gross revenues exceeding $75 million (calculated in accordance with § 24.709(a)(2) and (b)) in each of the two preceding years (calculated in accordance with § 24.720(f)), interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 3.5 percent; payments shall include both principal and interest amortized over the term of the license.

(2) For an eligible licensee with gross revenues not exceeding $75 million (calculated in accordance with § 24.709(a)(2) and (b)) in each of the two preceding years (calculated in accordance with § 24.720(f)), interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 2.5 percent; payments shall include interest only for the first year and payments of interest and principal amortized over the remaining nine years of the license term.

(3) For an eligible licensee that qualifies as a small business or as a consortium of small businesses, interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted; payments shall include interest only for the first two years and payments of interest and principal amortized over the remaining eight years of the license term.

(c) Late Installment Payments. Any licensee that submits a scheduled installment payment more than 15 days late will be charged a late payment fee equal to 5 percent of the amount of the past due payment. Payments will be applied in the following order: late charges, interest charges, principal payments.

(d) * * *

(2) If a licensee that utilizes installment financing under this section seeks to make any change in ownership structure that would result in the licensee losing eligibility for installment payments, the licensee shall first seek Commission approval and must make full payment of the remaining unpaid principal and any unpaid interest accrued through the date of such change as a condition of approval. A licensee's (or other attributable entity's) increased gross revenues or increased total assets due to nonattributable equity investments (i.e., from sources whose gross revenues and total assets are not considered under § 24.709(b)), debt financing, revenue from operations or other investments, business development or expanded service shall not be considered to result in the licensee losing eligibility for installment payments.
11. Section 24.717 is amended by revising paragraphs (a) and (b), removing paragraph (c), and redesignating paragraph (d) as paragraph (c) to read as follows:

§ 24.717 Bidding credits for licenses for frequency Block F.

(a) A winning bidder that qualifies as a small business or a consortium of small businesses may use a bidding credit of 15 percent to lower the cost of its winning bid.

(b) A winning bidder that qualifies as a very small business or a consortium of very small businesses may use a bidding credit of 25 percent to lower the cost of its winning bid.

(c) Unjust Enrichment * * *

* * * * *

12. Section 24.720 is amended by revising paragraph (b) introductory text; redesignating paragraphs (b)(2) and (b)(3) as paragraphs (b)(3) and (b)(4) and revising them; adding new paragraphs (b)(2) and (b)(5); and revising paragraphs (c)(2), (e), (f), (g), (j)(2), (l)(11)(i), (n)(1), (n)(3) and (n)(4) to read as follows:

§ 24.720 Definitions.

* * * * *

(b) Small Business; Very Small Business; Consortia

(1) * * *

(2) A very small business is an entity that, together with its affiliates and persons or entities that hold interests in such entity and their affiliates, has average annual gross revenues that are not more than $15 million for the preceding three years.

(3) For purposes of determining whether an entity meets the $40 million average annual gross revenues size standard set forth in paragraph (b)(1) of this section or the $15 million average annual gross revenues size standard set forth in paragraph (b)(2) of this section, the gross revenues of the entity, its affiliates, persons or entities holding interests in the entity and their affiliates shall be considered on a cumulative basis and aggregated subject to the exceptions set forth in § 24.709(b).

(4) A small business consortium is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition of a small business in paragraphs (b)(1) and (b)(3) of this section.

(5) A very small business consortium is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition of a very small business in paragraphs (b)(2) and (b)(3) of this section.

(c) * * *

(2) That complies with the requirements of § 24.709(b)(3) and (b)(5) or § 24.709(b)(4) and (b)(6).
(e) **Rural Telephone Company.** A rural telephone company is a local exchange carrier operating entity to the extent that such entity:

1. Provides common carrier service to any local exchange carrier study area that does not include either;
   - Any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or
   - Any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;
2. Provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;
3. Provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or
4. Has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

(f) **Gross Revenues.** Gross revenues shall mean all income received by an entity, whether earned or passive, before any deductions are made for costs of doing business (e.g., cost of goods sold), as evidenced by audited financial statements for the relevant number of most recently completed calendar years, or, if audited financial statements were not prepared on a calendar-year basis, for the most recently completed fiscal years preceding the filing of the applicant's short-form application (Form 175). If an entity was not in existence for all or part of the relevant period, gross revenues shall be evidenced by the audited financial statements of the entity's predecessor-in-interest or, if there is no identifiable predecessor-in-interest, unaudited financial statements certified by the applicant as accurate. When an applicant does not otherwise use audited financial statements, its gross revenues may be certified by its chief financial officer or its equivalent.

(g) **Total Assets.** Total assets shall mean the book value (except where generally accepted accounting principles (GAAP) require market valuation) of all property owned by an entity, whether real or personal, tangible or intangible, as evidenced by the most recent audited financial statements or certified by the applicant's chief financial officer or its equivalent if the applicant does not otherwise use audited financial statements.

(j)* *** *

2. For purposes of assessing compliance with the equity limits in § 24.709(b)(3)(i) and (b)(4)(i), where such interests are not held directly in the applicant, the total equity held by a person or entity shall be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain.

* * * *
For purposes of §§ 24.709(a)(2) and paragraphs (b)(2) and (d) of this section, Indian tribes or Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), or entities owned and controlled by such tribes or corporations, are not considered affiliates of an applicant (or licensee) that is owned and controlled by such tribes, corporations or entities, and that otherwise complies with the requirements of § 24.709 (b)(3) and (b)(5) or § 24.709 (b)(4) and (b)(6), except that gross revenues derived from gaming activities conducted by affiliated entities pursuant to the Indian Gaming Regulatory Act (25 U.S.C. 2701 et seq.) will be counted in determining such applicant's (or licensee's) compliance with the financial requirements of § 24.709(a) and paragraphs (b) and (d) of this section, unless such applicant establishes that it will not receive a substantial unfair competitive advantage because significant legal constraints restrict the applicant's ability to access such gross revenues.

A qualifying investor is a person who is (or holds an interest in) a member of the applicant's (or licensee's) control group and whose gross revenues and total assets, when aggregated with those of all other attributable investors and affiliates, do not exceed the gross revenues and total assets limits specified in § 24.709(a), or, in the case of an applicant (or licensee) that is a small business, do not exceed the gross revenues limit specified in paragraph (b) of this section.

For purposes of assessing compliance with the minimum equity requirements of § 24.709(b)(5) and (6), where such equity interests are not held directly in the applicant, interests held by qualifying investors or qualifying minority and/or woman investors shall be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain.

For purposes of § 24.709(b)(5)(i)(C) and (b)(6)(i)(C), a qualifying investor is a person who is (or holds an interest in) a member of the applicant's (or licensee's) control group and whose gross revenues and total assets do not exceed the gross revenues and total assets limits specified in § 24.709(a).

13. Section 24.813 is amended by revising paragraphs (a)(1), (a)(2) and (a)(4) to read as follows:

§ 24.813 General application requirements.

(a) * * *
(1) A list of any business, holding or applying for CMRS or PMRS licenses, five percent or more of whose stock, warrants, options or debt securities are owned by the applicant or an officer,
director, attributable stockholder or key management personnel of the applicant. This list must include a description of each such business's principal business and a description of each such business's relationship to the applicant.

(2) A list of any party which holds a five percent or more interest (or a ten percent or more interest for institutional investors as defined in § 24.720(h)) in the applicant, or any entity holding or applying for CMRS or PMRS licenses in which a five percent or more interest (or a ten percent or more interest for institutional investors as defined in § 24.720(h)) is held by another party which holds a five percent or more interest (or a ten percent or more interest for institutional investors as defined in § 24.720(h)) in the applicant. E.g., if Company A owns 5% of Company B (the applicant) and 5% of Company C, a company holding or applying for CMRS or PMRS licenses, then Companies A and C must be listed on Company B’s applications.

* * * * *

(4) In the case of partnerships, the name and address of each partner, each partner’s citizenship and the share or interest participation in the partnership. This information must be provided for all partners, regardless of their respective ownership interest in the partnership.

* * * * *

14. Section 24.839 is amended by revising paragraphs (a), (d)(1), and (d)(2) and adding paragraphs (d)(3), (d)(4), and (d)(5) to read as follows:

§ 24.839 Transfer of control or assignment of license.

(a) Approval required. Authorization shall be transferred or assigned to another party, voluntarily (for example, by contract) or involuntarily (for example, by death, bankruptcy or legal disability), directly or indirectly or by transfer of control of any corporation holding such authorization, only upon application and approval by the Commission. A transfer of control or assignment of station authorization in the broadband Personal Communications Service is also subject to §§ 24.711(e), 24.712(d), 24.713(b), 24.717(c) (unjust enrichment) and 1.2111(a) (reporting requirement).

* * * * *

(d) * * *

(1) The application for assignment or transfer of control is filed after five years from the date of the initial license grant; or

(2) The proposed assignee or transferee meets the eligibility criteria set forth in § 24.709 at the time the application for assignment or transfer of control is filed, or the proposed assignee or transferee holds other license(s) for frequency blocks C and F and, at the time of receipt of such license(s), met the eligibility criteria set forth in § 24.709;

(3) The application is for partial assignment of a partitioned service area to a rural telephone company pursuant to § 24.714 and the proposed assignee meets the eligibility criteria set forth in § 24.709;
(4) The application is for an involuntary assignment or transfer of control to a bankruptcy trustee appointed under involuntary bankruptcy, an independent receiver appointed by a court of competent jurisdiction in a foreclosure action, or, in the event of death or disability, to a person or entity legally qualified to succeed the deceased or disabled person under the laws of the place having jurisdiction over the estate involved; provided that, the applicant requests a waiver pursuant to this paragraph; or
(5) The assignment or transfer of control is pro forma.

* * * * *
APPENDIX C

FINAL REGULATORY FLEXIBILITY ANALYSIS

Pursuant to the Regulatory Flexibility Act of 1980, 5 U.S.C. § 603, the Commission incorporated an Initial Regulatory Flexibility Analysis (IRFA) into the Notice of Proposed Rule Making. Written public comments on the IRFA were requested. The Commission's final regulatory flexibility analysis for this Report and Order in WT Docket No. 96-59 is as follows:

A. NEED FOR AND PURPOSE OF RULES

1. This rule making proceeding was initiated to secure comment on proposals to eliminate all race- and gender-based provisions in our competitive bidding rules for our F block auction and proposals for streamlining our broadband PCS auction rules. It also sought comment on issues raised by the Sixth Circuit Court of Appeals when it remanded our PCS/cellular cross-ownership rule and related attribution rule. The proposals adopted herein are also designed to implement Congress's goal of giving small businesses, rural telephone companies, and businesses owned by members of minority groups and women the opportunity to participate in the provision of spectrum-based services in accordance with 47 U.S.C. § 309(j).

B. ISSUES RAISED BY THE PUBLIC IN RESPONSE TO THE INITIAL ANALYSIS

2. No comments were submitted specifically in response to the Initial Regulatory Flexibility Analysis.

C. SIGNIFICANT ALTERNATIVES CONSIDERED

3. The Notice of Proposed Rule Making in this proceeding offered numerous proposals. All significant alternatives have been addressed in the Report and Order. The majority of the commenters supported the major tenets of the proposed changes and some commenters suggested changes to some of the Commission's proposals. The regulatory burdens we have retained for D, E, and F block applicants, including small entities, are necessary to carry out our duties under the Communications Act of 1934, as amended, and the Omnibus Budget Reconciliation Act of 1993. For example, although we developed race- and gender-neutral rules, we retained the requirement that applicants indicate their status as a business owned by members of minority groups and/or women. This requirement will allow the Commission to submit its report to Congress concerning the participation of minorities and women in the provision of spectrum-based services.
APPENDIX D

Commenters

1. Ad Hoc Rural PCS Coalition
2. AirLink, L.L.C.
3. ALLTEL Corporation
4. American Women in Radio and Television
5. Antigone Communications Limited Partnership
6. AT&T Wireless Service, Inc.
7. BellSouth
8. Cellular Telecommunications Industry Association
10. Cincinnati Bell Telephone Company
11. Coalition of New York Rural Telephone Companies
12. Community Service Communications, Inc.
13. Conestoga Wireless Company
14. Cook Inlet Region, Inc.
15. DCR Communications, Inc.
16. Devon Mobile Communications, L.P.
17. General Wireless, Inc.
18. Go Communications Corporation
19. GTE Service Corporation
20. Gulfstream Communications, Inc.
21. Iowa L.P. 136
22. Ken W. Bray
23. KMTel, L.L.C.
24. Leong, Harvey
25. Liberty Cellular, Inc.
26. Mid-Plains Telephone, Inc.
27. Mountain Solutions
28. National Telecom PCS, Inc.
29. National Telephone Cooperative Association
30. New Dakota Investment Trust
31. NextWave Telecom, Inc.
32. North Coast Mobile Communications, Inc.
33. Omnipoint Corporation
34. Ondas Communications Service, Inc.
35. PCS Development Corporation
36. Personal Communications Industry Association
37. PersonalConnect Communications, L.L.C.
38. Peter Cramton
39. Phoenix, L.L.C.
40. Point Enterprises, Inc.
41. Radiophone, Inc.
42. Rendall and Associates
43. Roseville Telephone Company
44. Spectrum Resources, Inc.
45. Sprint Corporation
46. Telephone and Data Systems, Inc.
47. Telephone Electronics Corporation
48. U S West, Inc.
49. U.S. Intelco Wireless Communications, Inc.
50. Vanguard Cellular Systems, Inc.
51. Virginia PCS Alliance, L.C.
52. Western Wireless Corporation
53. Wireless Interactive Data Systems, Inc.
54. WPCS, Inc.
Late Filed or Ex Parte Comments

1. Advanced Telecommunications Technology, Inc.
2. Allied Communications Group, Inc.
3. Columbia Cellular, Inc.
4. Integrated Communications Group Corporation
5. Integrated Voice Sys
6. Opportunities Now Enterprised (ONE) Inc.
7. PCS One, Inc.
8. Thompson PCS Systems, Inc.

Reply Comments

1. AirLink, L.L.C.
2. Ameritech
3. AT&T Wireless Services, Inc.
5. BellSouth
6. Cincinnati Bell Telephone Company
7. Cook Inlet Region, Inc.
8. Cox Communications, Inc.
9. DCR Communications, Inc.
10. National Telephone Cooperative Association
11. NextWave Telecom, Inc.
12. North Coast Mobile Communications, Inc.
13. Omnipoint Corporation
14. Personal Communications Industry Association
15. PersonalConnect Communications, L.L.C.
16. Radiofone, Inc.
17. Rendall and Associates
18. Sprint Corporation
19. Sprint Spectrum & American Personal Communications
20. Telephone and Data Systems, Inc.
21. U S West, Inc.
22. Western Wireless Corporation