Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
County of Charles, Maryland and Sprint Nextel Corporation)) WT Docket N)	lo. 02-55
Mediation No. TAM-12003)	

MEMORANDUM OPINION AND ORDER

Adopted: October 19, 2009 Released: October 19, 2009

By the Deputy Chief, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. In this *Memorandum Opinion and Order*, we address a case referred to us for *de novo* review from Wave 1, Stage 2 mediation by the 800 MHz Transition Administrator (TA). The case involves a dispute between the County of Charles, Maryland (Charles County or the County) and Sprint Nextel Corporation (Sprint) (collectively, the Parties) over the reasonableness of Charles County's claim for costs quoted for various services from its consultant, RCC Consultants (RCC) and its vendor, Motorola, Inc. (Motorola). Based on our *de novo* review of the mediation record, the Recommended Resolution submitted by the TA-appointed mediator (TA Mediator or Mediator) in this case, ¹ and the Parties' position statements, we approve certain portions of Charles County's estimated consultant and vendor costs and disapprove other portions of these estimated costs.

II. BACKGROUND

2. The County's 800 MHz system consists of 11 fixed sites and 2329 subscriber units.² The 800 MHz Report and Order and subsequent orders in this docket require Sprint to negotiate a frequency relocation agreement (FRA) with each 800 MHz licensee that is subject to rebanding.³ Sprint and the County began rebanding negotiations on February 1, 2006.⁴ The first step in the process was negotiation of a Planning Funding Agreement (PFA). When the Parties were unable to agree on a PFA, Sprint requested the TA to assign a TA Mediator to assist the parties in their negotiations.⁵ The mediation did

¹ Recommended Resolution, Mediation No. TAM-12003 at 4 (March 6, 2009) (RR).

² See Proposed Resolution Memorandum of Charles County, Maryland, TAM-12003 (filed February 13, 2009) (Charles County PRM).

³ See Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order, 19 FCC Rcd 14969, 15021-45, 15069 ¶¶ 88-141, 189 (2004) (800 MHz Report and Order); Supplemental Order and Order on Reconsideration, 19 FCC Rcd 25120 (2004); Memorandum Opinion and Order, 20 FCC Rcd 16015 (2005); Second Memorandum Opinion and Order, 22 FCC Rcd 10467 (2007); Third Memorandum Opinion and Order, 22 FCC Rcd 17209 (2007).

⁴ See Wireless Telecommunications Bureau Announces That 800 MHz Band Reconfiguration for NPSPAC Channels Will Commence February 1, 2006 in the NPSPAC Regions Assigned to Wave 1, WT Docket 02-55, *Public Notice*, 20 FCC Rcd 20517 (WTB 2005).

⁵ RR at 2.

not resolve the disputed issues and, on February 26, 2006, the TA Mediator submitted a Recommended Resolution and forwarded it, with the mediation record, to the Public Safety and Homeland Security Bureau (Bureau) for *de novo* review. On September 10, 2007, the Bureau released the *Charles County PFA MO&O*, in which it found that Sprint was required to pay the County for the majority of its disputed costs. The Bureau directed the Parties to enter into a PFA consistent with its decision.

3. The County completed its planning and submitted its reconfiguration cost estimate to Sprint on November 17, 2008. On November 21, 2008, Sprint accepted the cost estimate as sufficiently complete to begin FRA negotiations, which began on November 25, 2008. The Bureau extended the deadline to complete negotiations several times, but, on February 6, 2009, the TA Mediator concluded that, although the Parties had made substantial progress in negotiating the terms of an FRA, significant disagreements remained concerning their respective rebanding cost estimates, which likely could not be resolved by a Bureau-imposed February 17, 2009 deadline. The TA Mediator therefore directed the Parties to file Proposed Resolution Memoranda (PRMs). After receiving an extension of time to submit a Recommended Resolution, the Mediator did so on March 6, 2009. Charles County and Sprint filed their Statements of Position on March 20, 2009.

III. DISCUSSION

A. Standard of Review

4. The Commission's orders in this docket assign Charles County the burden of proving that the funding it has requested is reasonable, prudent, and the "minimum necessary to provide facilities comparable to those presently in use" (Minimum Cost Standard). The Commission subsequently clarified that the term "minimum necessary cost" does not mean the absolute lowest cost under any circumstances, but the "minimum cost necessary to accomplish rebanding in a reasonable, prudent, and timely manner." The Minimum Cost Standard thus takes into account not only cost, but all of the objectives of the proceeding, including completing the rebanding process in a timely and efficient

⁶ *Id*

⁷ See County of Charles, Maryland and Sprint Nextel Corporation, WT Docket 02-55, Memorandum Opinion and Order, 22 FCC Rcd 16769 (PSHSB 2007) (Charles County PFA MO&O).

⁸ *Id.* at 16801 ¶ 49.

⁹ RR at 2.

¹⁰ *Id.* at 3.

¹¹ Id.

¹² See Charles County PRM; Proposed Resolution Memorandum of Sprint Nextel Communications, Inc., TAM-12003 (filed February 20, 2009) (Sprint PRM); Reply Proposed Resolution Memorandum of Charles County, Maryland, TAM-12003 (filed February 24, 2009) (Charles County Reply).

¹³ See supra n.1.

¹⁴ Statement of Position of Charles County Maryland, TAM-12003 (March 20, 2009) (Charles County SOP); Statement of Position of Sprint Nextel Corp., TAM-12003 (March 20, 2009) (Sprint SOP).

 $^{^{15}}$ 800 MHz Report and Order, 19 FCC Rcd at 15074 ¶ 198; 800 MHz Supplemental Order, 19 FCC Rcd at 25152 ¶ 71 (2004).

¹⁶ Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, *Memorandum Opinion and Order*, 22 FCC Rcd 9818, 9820 ¶ 6 (2007) (*Rebanding Cost Clarification Order*).

manner, minimizing the burden that rebanding imposes on public safety licensees, and facilitating a seamless transition that preserves public safety's ability to operate during the transition.¹⁷

5. In addition to the Minimum Cost Standard, our review of the Parties' positions is informed by the TA Metrics, which are derived from the rebanding costs of licensees that have reached FRAs with Sprint. At this stage in the rebanding program, the TA Metrics are accorded substantial, although not dispositive, weight in the assessment of rebanding cost proposals. The current metrics reflect data derived from over 600 executed Stage 2 FRAs involving public safety systems, including many that are larger and more complex than the County's. We have found that the TA Metrics provide a useful measure of cost reasonableness, because they are based on increasingly large amounts of historical information regarding the cost of rebanding public safety systems. Thus, the further a licensee's proposed costs for services and equipment exceed the TA Metrics, the higher the licensee's burden to justify those costs with record evidence.

B. Issues in Dispute

6. Charles County's current cost estimate for rebanding is \$2,948,002.10.²¹ Sprint contends that rebanding the County's system should cost \$1,942,206.70,²² a difference of \$1,005,795.40.²³ There is a wide disparity between the County's total cost estimate and the TA Metrics for rebanding of similarly sized systems. As of December 31, 2008, the median FRA funding requested by public safety licensees for total costs of a system of Charles County's size (2001-4000 subscriber units) was \$884,005 and the 75th percentile amount was \$1,400,528. Thus, Charles County's request is more than three and one quarter times greater than the median and approximately twice the 75th percentile amount for similarly sized systems. This exceptionally large deviation warrants careful scrutiny of the County's proposed costs. Generally, when analyzing disputes over cost issues, we compare the proposed costs to the TA Metrics. If the proposed costs deviate substantially from the Metrics, we then see if the licensee has provided a valid rationale for the elevated costs. In the instant matter, for most of the cost issues that are in dispute, the County has provided little if any justification as to why its proposed costs deviate so significantly from the TA Metrics.

1. Infrastructure Reconfiguration Costs

7. The parties dispute the estimated cost to reconfigure the County's 800 MHz infrastructure. Under the TA Metrics, the median total cost for reconfiguring infrastructure in a similarly sized system is \$44,200 and the 75th percentile cost is \$74,296.²⁴ The \$576,170 claimed by the County for network

¹⁸ The TA has made the Metrics available on its website. http://www.800ta.org/content/resources/FRA Statistics.pdf (TA Metrics).

¹⁷ *Id.* at 9820 ¶¶ 6, 8.

¹⁹ More specifically, the cost metrics for the case at hand derive from an analysis of 66 executed Stage 2 Public Safety FRAs which have between 2001-4000 subscriber units. TA Metrics at Table 2.

²⁰ We note that, as of December 31, 2008, the TA has seen 99 percent of the Stage 1 non-border FRAs and 88 percent of the Stage 2 non-border FRAs. *See* 800 MHz Transition Administrator, LLC Quarterly Progress Report for the Quarter Ended June 30, 2009 at 6. Available at http://www.800ta.org/content/reporting/quarterlyreports.asp

²¹ Charles County PRM at 10. See also Sprint PRM, Appendix at 1.

²² Sprint PRM. Appendix at 1.

²³ The Parties' costs are set out in detail in a spreadsheet appendix to Sprint's PRM, and Charles County agrees they are accurately reported. *See* Sprint PRM, Appendix at 1 and Charles County PRM at 10.

²⁴ See TA Metrics at Table 2.

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infrastructure reconfiguration²⁵ thus significantly exceeds—by nearly seven and a half times—the TA Metric's 75th percentile amount. Even Sprint's offer of \$300,466²⁶ is an increase of almost four and a half times the TA Metric's 75th percentile amount. The difference between the County's cost proposal and the amount deemed reasonable by Sprint is \$275,704. Of that disputed amount, \$229,304 is attributable to Motorola's proposed services and \$46,400 to RCC's consulting services.²⁷ We address Motorola's and RCC's costs separately below.

Motorola Costs a.

- Charles County seeks \$501,484 for Motorola's services for infrastructure reconfiguration; Sprint contends that these costs should be reduced by \$229,304 for a total of \$272,180.²⁸
- Sprint Position. Sprint raises three challenges to Motorola's proposed infrastructure reconfiguration costs:
 - The proposed costs exceed those associated with the reconfiguration of other National Capital Region (NCR) licensees' 800 MHz systems: ²⁴
 - The cost proposal for installing and removing the interim "back-to-back" system³⁰ is "based on unreasonable assumptions:" and
 - The project management costs associated with infrastructure reconfiguration are unreasonable.31
- 10. Sprint asserts that its proposed infrastructure reconfiguration cost is consistent with the costs Motorola anticipates incurring to reconfigure other systems in the NCR. For example, Sprint has offered one hour per channel to retune repeaters, and 1.5 hours per channel to adjust combiner ports.³² Sprint points out that, although Motorola agrees these functions can be performed in the time allotted. Motorola has added a one-hour per-trip, per-site, premium to cover extended travel time.³³ In the County's case,

²⁵ Sprint PRM, Appendix at 1.

²⁶ Id

²⁷ *Id*.

²⁸ *Id*.

²⁹ The NCR encompasses an area where multiple 800 MHz public safety licensees have interoperability agreements with one another and are coordinating their retuning efforts. In addition to Charles County, the NCR licensees are Fairfax County, Virginia; City of Alexandria, Virginia; Arlington County, Virginia; City of Manassas, Virginia; Prince William County, Virginia; Fauquier County, Virginia; Loudoun County, Virginia; District of Columbia; Montgomery County, Maryland; Frederick County, Maryland; Prince Georges County, Maryland; Metropolitan Washington Airports Authority; and University of Maryland.

³⁰ The "back-to-back" system is comprised of repeaters that receive signals on the former, pre-rebanding, NPSPAC mutual aid channels and retransmit them on the post-rebanding NPSPAC mutual aid channels, and vice-versa. Thereby, radios that have not yet been retuned to new NPSPAC mutual aid channels can interoperate with radios that have been retuned. At the conclusion of rebanding, when all radios are capable of accessing the post-rebanding NPSPAC channels, the back-to-back system is no longer necessary and will be dismantled.

³¹ Sprint PRM at 18-20.

³² Id at 19

³³ Id

however, Motorola contends the premium is justified because the travel time from Washington, D.C. (the location of Motorola's relevant subcontractor) to sites in Charles County is significant.³⁴

- 11. Sprint argues that the travel premium is unnecessary because the travel time from Washington D.C. to Charles County sites is not significantly different than the travel time between Washington D.C. and other suburban NCR member counties, such as Fauquier, Loudoun, and Prince William Counties in Virginia. It notes that Motorola did not include a "travel premium" in its cost estimates for those counties.³⁵ To the extent that Motorola based its "travel premium" on traffic congestion in the Washington, D.C. area, Sprint points out that the County's sites are being reconfigured during evening hours when traffic is less likely to be congested.³⁶
- 12. Sprint also claims that Motorola has added unnecessary travel time to discrete tasks associated with the installation and removal of each component of the back-to-back system, even though Motorola's subcontractor will complete multiple tasks in a single trip.³⁷ Sprint also questions the reasonableness of other Motorola cost estimates, such as Motorola's claim that ten hours of technician time will be required to install three conventional network expansion cards at each site. Sprint argues that this card installation activity "requires little more than setting a few parameters and then installing the cards.",38
- 13. Sprint also objects to the time the County has allotted for system documentation. Sprint claims that the County specifically directed Motorola to include, in its estimate, the cost of preparing diagrams and other documentation for the temporary back-to-back system to the same level of detail as the documentation for the County's existing system. Sprint also notes that the County directed Motorola to include the cost of preparing yet another set of system documentation for the post-rebanded system after the temporary back-to-back system is removed.³⁹ Motorola estimates that these two phases of document preparation will require 274 hours of effort at a cost of \$52,060. 40 Sprint, however, contends that it is unnecessary to prepare new documentation for a temporary system and, thereafter, to prepare new post-rebanding system documentation. It claims that it would suffice to update the County's existing documentation to reflect frequency changes and that this could be accomplished with 52 hours of effort at a cost of \$9.880.41
- 14. Sprint also argues that, if Motorola's infrastructure reconfiguration costs are reduced to the level that Sprint claims is reasonable, there should be a concomitant reduction in the associated project management costs.⁴² Thus, Sprint claims that if Motorola's cost for reconfiguring the County's infrastructure is reduced from \$501,484 to \$272,180—as Sprint submits is reasonable—Motorola's

³⁷ *Id*.

³⁴ Charles County PRM, Exhibit B at 1.

³⁵ Sprint PRM at 19.

³⁶ *Id*.

³⁸ *Id.* at 20.

³⁹ Id

⁴⁰ This figure is derived from summing up separate system documentation tasks in the cost estimate. See Sprint PRM at Appendix 3-6. See also RR at 8.

⁴¹ Sprint PRM at 20. See also RR at 8-9.

⁴² Sprint PRM at 21.

associated hours for project management services should be reduced from 840 hours (at a cost of \$147,000) to 564 hours (at a cost of \$98,700). 43

- 15. *Charles County Position*. The County counters Sprint's objections to Motorola's proposed "travel premium" on three grounds:
 - The travel premium is the kind of *de minimis* expense the Commission has urged Sprint to accept.
 - Charles County is at least as distant from Washington, D.C. as any other NCR member.
 - Travel within the County can be "fairly arduous," with site-to-site distances ranging up to 30 miles.⁴⁴
- 16. The County responds to Sprint's claim that infrastructure retuning costs are based on "unreasonable assumptions", by asserting that the County worked with Motorola to design a temporary conventional back-to-back overlay system that was "highly efficient and cost effective." It notes that it has effected savings in the overlay system because it "leverages" some existing network equipment. The County also claims that negotiations over the cost of the overlay system were hindered because Sprint did not agree to the use of the overlay system until after the negotiation period had ended. **
- 17. The County argues that the extent of documentation it seeks for the overlay system is consistent with the documentation that it had Motorola prepare when the County's existing system was installed. It submits that the "temporary" overlay system will likely be in place for three years and that full documentation of the system is necessary so technicians may quickly restore service in the event of outages. It also claims that "[d]ocumentation is necessary not only to construct the overlay system in the first place, but also to serve as the roadmap for how technical staff will actually maintain the overlay system during the multiple years of its expected life."
- 18. *Mediator's Recommendation*. The TA Mediator recommends that the Commission approve \$444,963 for Motorola's reconfiguration of the 800 MHz infrastructure. This represents a \$56,521 reduction from the County's \$501,484 request—a \$42,180 reduction in reconfiguration cost and a \$14,341 reduction in program management cost.

⁴³ *Id.* Sprint claims that in the County's original quote, of the 2491 hours the County sought for Motorola to reconfigure the County's infrastructure, 885 hours (or 34%) were allocated to "professional services" for a project manager, system engineer, and system technologist. We note that the County actually sought 840 hours of professional services. Under Sprint's proposal, the 564 hours allocated for "professional services" represents 41% of the 1376 total hours Sprint contends is reasonable for Motorola's infrastructure work.

⁴⁴ See Charles County Reply at 10 citing Rebanding Cost Clarification Order, 22 FCC Rcd 9821 ¶ 10.

⁴⁵ Sprint PRM at 18.

⁴⁶ Charles County PRM at 3.

⁴⁷ *Id.* Specifically the County asserts that the temporary network will use existing transmit and receive antennas, transmitter combiners, receiver multi-couplers, microwave transport, frequency and timing references, console electronics, and simulcast distribution equipment.

⁴⁸ Charles County Reply at 9-10.

⁴⁹ *Id.* at 11.

⁵⁰ Id

⁵¹ RR at 27.

⁵² *Id.* at 29.

- 19. The Mediator recommends that the Commission allow the one-hour "travel premium" included in Motorola's infrastructure reconfiguration costs.⁵³ The Mediator reasons that the County's only obligation was to show that the travel premium satisfied the "Minimum Reasonable Cost Standard." In demonstrating that it met the standard, the County was not obliged to explain why similarly-situated NCR licensees did not include travel premiums in their cost estimates.⁵⁴ The travel premium was justified, the Mediator decided, because of the County's explanation that travel between the County and Washington, D.C. is burdensome, and that travel within Charles County can also be difficult.⁵⁵
- 20. The Mediator recognizes that neither Sprint nor the County addresses in their PRMs Motorola's proposed infrastructure reconfiguration costs on a line-item basis. The Mediator attributes this lack of information to Sprint's delay in deciding whether it was willing to accept the County's proposal for an overlay system. The Mediator states that the prolonged uncertainty regarding the overlay system precluded detailed discussion of discrete costs and made mediation of infrastructure reconfiguration costs extremely difficult. Nonetheless, the Mediator concludes that, even within those constraints, Charles County has satisfied its burden of proof that Motorola's costs associated with the overlay system conform to the Minimum Cost Standard and recommends that the Commission approve those costs.
- 21. The Mediator acknowledges that documentation of the overlay system is necessary, but finds it unreasonable for the County to insist on documentation for a temporary system that is as extensive as the documentation for the original or permanent system, and concludes that more modest documentation should suffice.⁵⁹ The Mediator believes that Motorola could provide the County with such interim documentation within the 52 hours (at a cost of \$9,880) that Sprint proposes for updating the existing documentation.⁶⁰
- 22. The Mediator finds it reasonable that, if infrastructure reconfiguration cost is reduced to the amount proposed by Sprint, there should be a concomitant reduction in the cost of Motorola's management services attributable to infrastructure reconfiguration. The Mediator notes that Motorola's management services represent 34 percent of the total infrastructure costs. Accordingly, the Mediator recommends that Motorola's management services be reduced by \$14,341, which is 34 percent of the \$42,180 amount by which the Mediator proposes reducing Motorola's total infrastructure costs. ⁶²
- 23. Decision. We agree with most of the Mediator's recommendations and the reasoning behind them. However, we do not concur with the Mediator's finding that Charles County met its burden of proof with regard to the one-hour "travel premium." As an initial matter, we find no rational basis for such a premium, since Charles County is not more distant from Washington, D.C. than other NCR jurisdictions for which no premium has been required. Moreover, we take Sprint's point that, since the subcontractor is being paid a nighttime overtime rate of \$285 per hour, it is unlikely that it will be

⁵³ *Id.* at 28.

⁵⁴ *Id*.

⁵⁵ *Id*.

⁵⁶ *Id.* at 29.

⁵⁷ *Id*.

⁵⁸ *Id*.

⁵⁹ Id. at 28.

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² *Id*.

affected by daytime traffic congestion in the Washington, D.C. area. Also, we find no record support for the County's contention that the premium is justified because travel within the County is "arduous." Finally, we stress that the purpose of the *de minimis* cost exception is to eliminate protracted negotiations over legitimate expenses, not to set a floor beneath which the legitimacy of an expense can never be challenged. We therefore reject Charles County's claim that it is entitled to a one-hour travel premium for Motorola's subcontractor.

- 24. We credit Charles County's contention in its Statement of Position that it maintains detailed documentation for its radio system.⁶⁵ We believe that the comparable facilities standard dictates that the County's documentation should be as complete and detailed at the conclusion of rebanding as it was before. However, we find it unreasonable for the County to request drafting of new documentation for the temporary overlay system and separate, newly-drafted documentation when rebanding is complete and the temporary overlay system is discontinued. Sprint has contended that, in both instances, existing documentation can be updated to reflect changes, and the County has neither rebutted that contention nor met its burden of showing that the \$52,060 it seeks for newly-drafted documentation is a reasonable and necessary element of rebanding. We therefore agree with the Mediator that the \$9,980 estimated by Sprint for updating existing documentation to reflect changes in the County's system is adequate to ensure that technicians have sufficient information to maintain both the interim overlay system and the post-rebanding system.
- 25. In sum, we approve no more than \$444,963 for Motorola's efforts to reconfigure Charles County's 800 MHz infrastructure. This represents a \$42,180 reduction in reconfiguration cost and a \$14,341.00 reduction in program management costs from the County's position. Further, as the parties develop a new estimate for Motorola's costs in this category, we disallow the one-hour travel premium.

b. RCC's Infrastructure Costs

- 26. Charles County is also seeking \$59,511.60 for RCC's consulting services in connection with the reconfiguration of Charles County's 800 MHz infrastructure.⁶⁶ Sprint contends that \$13,111.60 in consulting services will be adequate.⁶⁷ The amount in dispute is thus \$46,400.⁶⁸
- 27. Sprint Position. Sprint notes that RCC's proposed efforts for infrastructure reconfiguration duplicate the efforts of the County's internal staff, observing that the 280 hours requested for RCC for infrastructure reconfiguration are identical to the hours requested for the County's internal staff for this same category. As a result, Sprint claims, "all infrastructure tasks will have both a County resource and an RCC resource shadowing one another at all times." It argues that such redundancy is unreasonable and violates the Commission's express instruction to "reasonably avoid duplication of effort." Sprint claims that "[i]t may be reasonable to afford the County a certain level of deference with

⁶³ Sprint PRM at 19.

⁶⁴ This has not been a cost factor in other rebandings, even when the licensee operates in remote and mountainous areas.

⁶⁵ Charles County Statement of Position at 2-3.

⁶⁶ RR at 10. See also Sprint PRM, Appendix at 1.

⁶⁷ Sprint PRM, Appendix at 1.

⁶⁸ *Id*.

⁶⁹ Sprint PRM at 21-22.

⁷⁰ Id. citing Charles County PFA MO&O, 22 FCC Rcd at 16772 ¶ 11.

respect to the allocation of effort involved in certain tasks, but it is not reasonable simply to double-staff those tasks."⁷¹

28. *County Position*. The County argues that no duplication of effort exists between the assigned activities of its internal staff and RCC with respect to infrastructure reconfiguration.⁷² It argues:

As has been described and affirmed by the FCC in its order on the PFA appeal, Motorola, RCC and County staff frequently meet face-to-face in planning, execution, and problem-solving capacities, which require hours of involvement from more than a single resource on the same basic task. We believe this collaborative, teaming approach actually saves money in the long-run, as plans can be defined, refined, and agreed upon in much quicker fashion than when parties go down separate and sometimes diverging paths resulting in a great deal of re-work.⁷³

- 29. *Mediator Recommendation*. The Mediator recommends that the Commission find that Charles County is entitled to its entire request of \$59,511.60 for RCC's services. The Mediator's recommendation stems from the Commission's decision in the *Charles County PFA MO&O* to allow Charles County to use a "tripartite" project management structure in which Charles County, Motorola, and RCC "collaborate on planning tasks, with the County assuming a 'supervisory' role in most activities." The Mediator notes the Commission's warning that such a management approach must not result in duplication of effort, but concludes that the combined efforts of RCC and the County do not appear duplicative. The Mediator views RCC as providing expert technical oversight of Motorola's work, while County employees provide expert oversight addressing the specific needs and conditions of the County. The Mediator also accepts the County's argument that the County's proposal could actually save money in the long-run as it would facilitate planning and, finally, concludes that the County has met its burden of proof under the Minimum Cost Standard.
- 30. Decision. We disagree with the Mediator's assessment. The County is correct that the Charles County PFA MO&O contemplated that Motorola, RCC, and County representatives would meet frequently in "planning, execution and problem-solving capacities" during the \$275,000 planning phase of the project. We do not, however, interpret the Charles County PFA MO&O as requiring an RCC employee and a County employee to "shadow" Motorola's subcontractor's technicians at each stage of rebanding implementation at a cost of \$59,511.60—over \$5,400 per site. The County represents that its plans for reconfiguration already have been "defined, refined and agreed upon." Implementing those plans therefore should not require the duplication of effort the County proposes. Accordingly, we find that the County has failed to meet its burden with respect to justifying RCC's infrastructure

⁷¹ *Id*.

⁷² Charles County Reply PRM at 12-13.

⁷³ *Id.* at 13.

⁷⁴ RR at 29.

⁷⁵ *Id.* at 30 *citing Charles County PFA MO&O*, 22 FCC Rcd at 16771, 16774 ¶¶ 8, 17.

⁷⁶ Id. citing Charles County PFA MO&O, 22 FCC Rcd at 16772 ¶ 11.

⁷⁷ *Id.* at 30.

⁷⁸ *Id*.

⁷⁹ See Charles County Reply PRM at 11 citing Charles County PFA MO&O, 22 FCC Rcd at 16771, 16774, ¶8.

⁸⁰ Sprint PRM at 21.

⁸¹ Charles County Reply PRM at 13.

reconfiguration costs. We find that \$13,111.60 is sufficient to allow RCC to undertake any planning and problem-solving that was not accomplished earlier.

2. Subscriber Unit Reconfiguration Costs

31. The Parties dispute Charles County's estimated cost to complete the reconfiguration of the County's subscriber units. Charles County has requested \$1,120,797.40 to reconfigure its subscriber units. Sprint has deemed \$891,528.10 adequate for this task. The \$229,269.30 in dispute consists of \$20,300 in disputed Motorola costs, \$99,559 in disputed RCC costs, and \$109,410 in disputed costs for Charles County's internal staff. The Script in the state of the

a. Motorola's Subscriber Unit Costs

- 32. Charles County seeks \$655,684 for Motorola's services to manage the retuning of Charles County's subscriber units; Sprint contends that management of this element of the County's rebanding may be done for \$635,384, a difference of \$20,300.85
- 33. Sprint Position. Sprint contends that certain of Motorola's proposed subscriber unit retuning costs are unreasonable because they exceed the costs of other NCR member licensees without adequate explanation. Specifically, Sprint objects to Motorola's request for 2.0 hours per day for retuning project management, even though Charles County intends to retune only about 20 radios per day during the first touch. Sprint claims that other NCR member licensees typically retune between 20 and 45 radios per day with an associated project management cost of 1.4 to 2.4 hours per day. Sprint argues that, since the number of the County's radios retuned per day will be at the lowest end of the range, so should the corresponding project management time. It therefore submits that 1.5 hours of project management time per day is adequate for the first touch and 1.8 hours of project management time per day for the second touch.
- 34. *County Position*. The County challenges Sprint's claim that the number of radios retuned per day correlates with the program management cost associated with retuning the radios. ⁹¹ Instead, the County claims, there may be an inverse relationship between those factors, *i.e.*, the reason that only 20 radios can be retuned per day is due to differences in templates and encryption key loading, making the retuning more complex and hence requiring expanded management time. ⁹² In addition, the County claims that Motorola has stated that its increased program management costs are due to more stringent audit

⁸² RR at 11. See also Sprint PRM, Appendix at 1.

⁸³ Sprint PRM, Appendix at 1.

⁸⁴ RR at 11.

⁸⁵ Id.

⁸⁶ Id. at 11-12 citing Sprint PRM at 22.

⁸⁷ *Id.* at 12.

⁸⁸ Id.

⁸⁹ Id.

⁹⁰ Id

⁹¹ *Id.* at 12 *citing* Charles County Reply PRM at 11.

⁹² *Id. citing* Charles County Reply PRM at 12.

requirements imposed by Sprint and the need to track the date licensees gain beneficial use of the radios so that the warranty period can be determined.⁹³

- 35. Sprint challenges the asserted need for more stringent auditing, stating it "is not requesting any additional audits or any additional detail beyond that originally envisioned in the program." It "assumes that the data collection Motorola has performed in other reconfigurations has been 'thorough and accurate,' and will not compensate Motorola for additional project management costs associated with keeping appropriate records." Sprint also questions the need to maintain additional records regarding the beneficial use date of retuned radios, arguing that no additional record keeping is required because, "in the vast majority of cases, the units will be returned to their users the same day they are reprogrammed, so the date the licensee first gains beneficial use will be the date on which the unit is reprogrammed."
- 36. *Mediator Recommendation.* The Mediator recommends that the Commission find that the County is entitled only to Sprint's offer of \$635,384 for Motorola's management services during the subscriber unit reconfiguration process. ⁹⁷ The Mediator agrees with Sprint that some of Motorola's proposed costs for administering the retuning of the County's subscriber units are unreasonable because they exceed the amounts that other NCR member licensees have allotted for comparable services from Motorola. ⁹⁸ The Mediator also submits that Sprint effectively refuted the arguments Motorola made in support of these costs. ⁹⁹
- 37. Decision. We agree with the Mediator's recommendation. The County has not established why its subscriber unit retuning cost should be significantly higher than that of other NCR member licensees. Its claim that the higher cost is attributable to Sprint's "more stringent audit requirements" is refuted by Sprint, as is the County's claim that extensive management time is required to determine the date that the County obtains beneficial use of subscriber units. Moreover, the County has offered no supportable basis for its claim that two hours of Motorola management time per day is necessary for a Motorola employee to "manage" retuning work conducted by a Motorola subcontractor. Looking to the record, we agree with Sprint and the Mediator that the County has not met its burden of showing that \$655,684 is the amount reasonably necessary for Motorola's management services associated with retuning subscriber units. Accordingly we allow \$635,384 the amount Sprint claims is adequate for Motorola's management services associated with subscriber unit retuning.

b. RCC's and the Licensee's Subscriber Unit Management Costs

38. Charles County seeks \$465,113 for the oversight and management services of RCC and its own internal staff in connection with Motorola's subcontractor's retuning of subscriber units. Sprint contends that \$256,143.70 is adequate for these services, resulting in a difference of \$208,969.30.

⁹³ *Id. citing* Charles County PRM at 5, Ex. B at 2-3.

⁹⁴ Id. at 13 citing Sprint PRM at 23.

⁹⁵ Id

⁹⁶ Id. citing Sprint PRM at 23-24.

⁹⁷ *Id.* at 31.

⁹⁸ Id.

⁹⁹ Id

¹⁰⁰ Id. at 13 citing Sprint PRM, Appendix at 1.

¹⁰¹ *Id*.

Sprint's proposal represents a reduction of \$99,559.20 in RCC costs and \$109,410.10 in the County's internal costs. 102

- 39. *Sprint Position.* Sprint argues that the 1352 hours of project management that the County proposes for RCC and internal staff during the first touch subscriber unit reconfiguration process is "extraordinarily high" relative to the benchmark in the TA's Subscriber Equipment Deployment (SED) form. ¹⁰³ Sprint points out that, in the SED form, the typical project management hours required for a system the size of the County's is 386 hours. ¹⁰⁴
- 40. Sprint stresses that it is not attempting to restrict the County to the 386 hour benchmark, noting that its offer of 516 hours for program management related to subscriber unit retuning exceeds the SED benchmark by 130 hours. With respect to the requested 1352 hours, however, Sprint argues that the County must provide "some objective and verifiable justification for the variation, including the specific factors that drive the numbers so far higher" than the benchmark levels. 106
- 41. Sprint also challenges the level of effort Charles County proposes for testing and validation of its subscriber unit templates. The County proposes four hours per template during the first touch (two hours for RCC and two hours for the internal staff) and two hours combined for the second touch. Sprint agrees that validation is prudent, but submits that the requested hours are "excessive" and proposes that they be cut in half.
- 42. *County Position.* The County challenges Sprint's reliance on the SED benchmark, observing that the instructions to the SED form state:

The TA recognizes that each system is unique, and in some cases the suggested [level of effort] numbers may not be suitable for some tasks. . . . Each licensee should request only the minimum hours required to complete a task based on their network. 110

The County argues that it based its costs "on known requirements from past programming efforts in terms of internal/external resource needs and logistical time/expenses incurred" and that it justified its proposed level of effort for subscriber retuning in its original FRA cost estimate and defended that level of effort throughout the course of negotiations and mediation. [11]

43. The County also claims that Motorola requires that internal staff and RCC be involved in the retuning process "to make the entire programming effort as efficient as possible, so that the programming can be done within the allotted timeframes." Specifically, the Motorola Statement of

¹⁰² *Id*.

¹⁰³ Id. at 14 citing Sprint PRM at 25.

¹⁰⁴ See Sprint PRM at 25 (citing 800 MHz Transition Administrator LLC, Subscriber Equipment Deployment Request Form –Version 1 at 6). Sprint further observes that the SED number is not a minimum, but reflects a "presumptively reasonable figure that could even be excessive for some licensees." *Id*

¹⁰⁵ Id. at 26.

¹⁰⁶ *Id*.

¹⁰⁷ *Id.* at 26-27.

¹⁰⁸ Id.

¹⁰⁹ *Id.* at 27.

¹¹⁰ Charles County PRM at 5-6 quoting 800 MHz Band Reconfiguration, Subscriber Equipment Deployment Request Instructions (emphasis in original).

¹¹¹ *Id.* at 6.

¹¹² *Id*.

Work (SOW) makes Charles County responsible for gathering information about system users, reviewing and approving templates, and ensuring that the radios and spare parts are made available on schedule for reconfiguration. 113

- 44. *Mediator's Recommendation*. The Mediator recommends that the Commission find that the County is entitled to its entire request for \$465,113 for the services of RCC and the County's internal staff in connection with the reconfiguration of the County's subscriber units. The Mediator recognizes that this recommendation endorses very high costs and a significant level of project management effort, but states these costs and level of effort are justified because the Commission accepted the County's tripartite management structure in the *Charles County PFA MO&O*. The Mediator recognizes that the commission accepted the County's tripartite management structure in the *Charles County PFA MO&O*.
- 45. *Decision.* We disagree with the Mediator's conclusion. As an initial matter, the TA Metrics show that the County's proposed subscriber unit retuning management cost of \$465,113 for its internal staff and RCC is three times the median <u>total</u> project management costs incurred in a reconfiguration of a system of Charles County's size. The TA Metrics are based on a large body of historical information on system retuning costs. Although they are not a limit or "cap" on a licensee's expenses, they establish a presumptively valid cost unless the licensee establishes that its system is materially different from the systems from which the metrics were derived. Here, the County has not done so.
- 46. The County claims that Motorola requires the County to gather information about system users, review and approve templates, and ensure that the radios and spare parts are made available on schedule for reconfiguration. ¹¹⁷ The County, however, sought and received planning funds for substantially the same tasks—subscriber unit inventory and reconfiguration plan design. ¹¹⁸ The record does not demonstrate why these tasks need be duplicated during the implementation phase of reconfiguration. Moreover, the County has been the beneficiary of the activities of the National Capital Region Planning Coalition, which has developed the master planning schedule for reconfiguration in the region and overseen development of templates that ensure that interoperability is maintained among the Coalition's members during and after band reconfiguration.
- 47. The Mediator notes that, during mediation, it became apparent that that many of the disputed internal costs stemmed from the County's insistence on having two County employees present during the subscriber unit retuning process: one to coordinate the operations of the Motorola subcontractor retuning the radios, the second to represent the particular agency having its radios retuned. This latter employee would be responsible for ensuring that agency employees deliver the radios on time, that they understand the changes made to the units, and that the radios are returned to service once retuning is complete.
- 48. The County also proposes to have an RCC representative present for 224 hours during the retuning of subscriber units, whereas Sprint submits that 96 hours are adequate. ¹²¹ The Mediator,

¹¹³ RR at 15 citing Charles County Reply PRM at 15.

¹¹⁴ *Id*. at 31.

¹¹⁵ *Id.* at 32.

¹¹⁶ TA Metrics Table 2.

¹¹⁷ RR at 15.

¹¹⁸ See generally Charles County PFA MO&O.

¹¹⁹ RR at 32.

¹²⁰ *Id*.

¹²¹ Id. citing Sprint PRM, Appendix at 10.

however, recommends that the 224 hours of RCC time be approved because it is less than the 372 hours that Sprint agreed to for Motorola's program management services in connection with subscriber unit retuning and a fraction of the more than 1600 hours that Sprint offered for the services of the County's internal staff in supervising the retuning of the radios. 122

- 49. We find nothing in the *Charles County PFA MO&O* that can be construed as approval of a "management structure" whereby two County employees and an RCC employee would each spend substantial periods of time simultaneously monitoring the activities of the Motorola subcontractor technician assigned to retune the County's radios. ¹²³
- 50. The Mediator recommends that the 224 hours sought for RCC's management services should be approved because it is less than the 372 hours Sprint approved for Motorola's management services and the 1600 hours Sprint offered for the management services of the County's internal staff. We disagree with the Mediator's recommendation because the operative question is whether the record supports RCC's proposed hours given the other resources already devoted to the management of the subscriber unit retuning process, *i.e.*, two of the County's staff and a Motorola manager, all overseeing the Motorola subcontractor performing the actual work. We find no adequate record support for this duplication of effort that the Bureau warned about in the *Charles County PFA MO&O*. We are not prepared to say which of these individuals overseeing the process is dispensable or not; only that the County has not shown that all of them are essential for retuning the County's radios consistent with the Minimum Necessary Cost standard. Accordingly, we find that the County has not met its burden of proof with respect to management of the subscriber unit retuning process and find that it is only entitled to \$256,143.00 for this task.

3. Testing

51. The Parties dispute Charles County's proposal for system testing to be conducted prior to, during, and after the retuning of its 800 MHz network. The County seeks \$365,799.90 for system testing, while Sprint contends that \$167,816 is sufficient. Of the \$197,983.90 in dispute, \$134,512.20 is for Motorola's services, \$16,458.50 is for RCC's services, and \$47,013.20 is for services by the County's internal staff. At issue are several different types of tests, including functional testing, site testing, optimization testing, drive testing, and bidirectional amplifier (BDA) coverage testing. We discuss each of these issues below.

a. Functional Testing

- 52. Charles County seeks \$15,200 for 80 hours of Motorola's services associated with functional testing. Sprint submits that \$1,520 to cover eight hours of Motorola's services is sufficient, thus leaving \$13,680 in dispute. 128
- 53. *Sprint Position.* Sprint argues that the County proposes a level of functional testing that significantly exceeds that done by similar sized licensees. ¹²⁹ Specifically, Sprint points out that the

¹²² RR at 32-33.

¹²³ See supra \P 47.

¹²⁴ See supra ¶ 44.

¹²⁵ See Sprint PRM at 12, Appendix at 1.

¹²⁶ *Id.*, Appendix at 1.

¹²⁷ *Id.* at 11.

¹²⁸ *Id*.

¹²⁹ Sprint PRM at 12-14.

County's proposed testing costs are more than two and a half times the 75th percentile in the TA's Metrics for total engineering and verification costs for similar-sized NPSPAC licensees. 130 Moreover, Sprint points to Motorola's acknowledgement that "[m]ost jurisdictions have accepted a 4-test package best described as one all-sites test and three additional functional tests that can be conducted from a single location by a lone System Technician, with 4 to 8 hours to conduct those tests." ¹³¹

- County Position. The County proposes 19 functional tests, requiring greater time and, in some cases, multiple technicians to simultaneously monitor network performance at different sites in the network. 132 Sprint, however, counters that Motorola included 19 different functional tests in its proposal only because the County directed it to do so. ¹³³ Sprint argues that the mere fact a licensee requests a particular level of functional testing does not render the testing reasonable and prudent. ¹³⁴ Sprint also argues that the relatively minor changes made to a system during reconfiguration do not justify the same level of functional testing done when new systems are first placed into operation. 135
- Charles County argues otherwise. It contends that it is entitled to employ functional testing that is "comparable to the tests performed when the system was first installed" noting that "all the major system components are being touched in some direct or indirect fashion and the core master system requires a software upgrade to embed the rebanding logic." The County states that its proposed functional test plan is only one-sixth the size of the test plan it employed when it first installed the network 137
- The County also argues that "[t]here is no way 'reasonably' to verify . . . system functional comparability with an incomplete 4-test script generic test plan" and that acceptance of such an abbreviated test plan "would be irresponsible for Charles County in terms of verifying comparability and protecting its radio users, no matter what other licensees have chosen to do." It points out that Motorola has acknowledged that the County's 800 MHz radio system differs from most systems because "[n]one of the other licensees accepting 8 hours [for functional testing] employed RF-based fire station alerting."139
- Mediator Recommendation. The Mediator recommends that the Commission find that Charles County is entitled to its requested \$15,200 for 80 hours of functional testing by Motorola. 140 The Mediator submits that Sprint has not taken into account that the "RF-based fire station alerting" feature, which requires additional time to functionally test, relative to systems that lack such a feature.
- The Mediator also concludes that the County has met its burden of proof for a full range of functional testing under the Minimum Cost Standard because: (a) extensive changes are being made to

¹⁴¹ *Id*.

¹³⁰ *Id.* at 13. ¹³¹ Id. at 15 n.36 quoting Charles County PRM at 8. 132 Charles County PRM at 8. ¹³³ Sprint PRM at 15. ¹³⁴ *Id*. ¹³⁵ *Id*. ¹³⁶ Charles County PRM at 7-8. ¹³⁷ *Id.* at 8. ¹³⁸ Charles County Reply at 7. 139 Charles County PRM at 9. ¹⁴⁰ RR at 33.

the County's system, and (b) the level of testing the County proposes is only one-sixth the extent of the test plan that was employed when the system was first installed. 142

59. Decision. The only material factor distinguishing the County's system from comparable systems is the "RF based fire station alerting" feature. The record, however, contains no more than an assertion that this fire station alerting feature requires additional functional testing. The County has not described the extent of such additional testing, much less the associated time and cost required. We presume that the time and cost exceed that for the 4-test protocol, which Motorola states most jurisdictions have accepted. We cannot, however, find record support for a 150 percent increase in cost to accommodate functional testing of this single feature on the overall Charles County system. Given the County's failure to document the additional testing time required for the fire station alerting feature, we concur with Sprint that no basis exists to allocate more than \$1,520 to cover Motorola's 4-test protocol.

b. Site Testing

- 60. Charles County seeks \$68,400 for 240 hours of Motorola's site testing services. Sprint submits that \$48,450 for 170 hours of Motorola's services is adequate, thus leaving \$19,950 in dispute. The County proposes three 80-hour tests—a pre-rebanding benchmark site test, a post-rebanding acceptance test, and another acceptance test once the temporary overlay system is discontinued.
- 61. *Sprint Position.* Sprint agrees to three tests, but argues that the third test should be abbreviated significantly, because a complete acceptance test following removal of the temporary overlay system is unnecessary. Sprint asserts that removal of the overlay system will have no effect on the repeaters for the permanent network, and that the removal of the temporary repeaters from the combiners should have "little or no impact" on the performance of those combiners. Sprint has offered one hour of Motorola time per site (for a total of ten hours) to verify that removal of the temporary overlay system does not impact the proper operation of the permanent network.
- 62. County Position. The County disputes Sprint's conclusion that removing the temporary overlay system will not have a significant impact on the performance of the permanent system. It argues that the temporary system is designed to operate as an integrated part of the permanent network, with certain components being shared, such as receiver multi-couplers, tower-top amplifiers, and combiners, "all of which can be affected by removing components that have been integrated and optimized to work together."
- 63. *Mediator Recommendation*. The TA Mediator recommends that the Commission find that the Licensee is entitled only to the site test costs offered by Sprint. The Mediator agrees with Sprint that the same level of effort is not required for the three system tests, *i.e.*, that the last test following removal of the overlay system need not be as time-consuming as the prior two tests. The Mediator

¹⁴² Id at 33_34

¹⁴³ See Sprint PRM, Appendix at 11. These tasks are covered under three line items, one captioned as "Pre Rebanding Benchmark Testing" and two captioned as "Post-Rebanding Acceptance Testing."

¹⁴⁴ Id

¹⁴⁵ Sprint PRM at 16.

¹⁴⁶ *Id*.

¹⁴⁷ Id

¹⁴⁸ Charles County Reply at 7.

¹⁴⁹ RR at 34.

observes that if a potential problem arises in the course of removal of the overlay system, additional tests, as required, may be requested by change order. 150

64. Decision. We concur in the Mediator's recommendation. The County has not justified the need for extensive testing of the sites once the overlay system is removed. Even if receiver multicouplers, tower top amplifiers, and combiners could be affected by removal of the temporary equipment, the effect thereof could readily be ascertained by simple "before and after" measurements of received signal strength and power output at, respectively, the multi-couplers' and combiners' output ports. Any anomaly noted could be corrected pursuant to a change order. We therefore approve only the \$48,450.00 offered by Sprint for 170 hours of Motorola's site testing services.

c. Conventional System Optimization and Testing

- 65. Charles County seeks \$15,200 for 80 hours of Motorola's services for optimizing the conventional back-to-back system. Sprint contends that \$8,740 for 46 hours will suffice for system optimization, leaving \$6,460 in dispute. 152
- 66. Sprint Position. Sprint argues that neither Charles County nor Motorola has detailed the specific testing efforts, and associated time periods, for the 80 hours of services allocated for optimization of the conventional back-to-back system.¹⁵³ Sprint claims that Motorola's only justification is that the estimate is based on the experience of its subcontractor when it installed and optimized the County's original conventional simulcast overlay system.¹⁵⁴ Sprint claims that optimization would require one hour for each of the ten repeaters and that other optimization tasks would occupy 16 hours, for a total of 46 hours at a cost of \$8,740.
- 67. *County Position.* The County does not specifically address system optimization in its PRM, other than to include Motorola's 80 hour estimate, without explanation, in its proposed costs. ¹⁵⁵
- 68. *Mediator Recommendation*. The Mediator recommends that the Commission find that Charles County is entitled only to the conventional system optimization and testing costs proposed by Sprint, *i.e.*, \$8,740.00 for 46 hours of Motorola's services. The Mediator agrees with Sprint that the County's estimate of 80 hours was based on no more than an unrelated installation and optimization cost associated with the County's original conventional simulcast overlay system. Moreover, the Mediator further discounted the County's estimate because the cost of installing and optimizing a new system would likely be far greater than the cost of optimizing an already-installed, retuned, 800 MHz network. The lack of detail on the specific tasks involved in the optimization and testing of the temporary back-to-back system precludes an accurate estimate of the associated cost. The only support offered by the County is the "empirical basis for the Wireless Communications quote," *i.e.*, its contractor's cost for optimizing and testing the County's initial system.

¹⁵¹ See Sprint PRM, Appendix at 11.
¹⁵² Id.
¹⁵³ Sprint PRM at 16.

¹⁵⁴ *Id*.

¹⁵⁵ Charles County PRM, Ex. B at 3.

¹⁵⁶ RR at 35.

¹⁵⁷ *Id*.

¹⁵⁸ *Id*.

¹⁵⁹ Charles County PRM at 8.

Decision. We conclude that the contractor's cost for optimizing and testing the County's initial system is not a reliable index of the cost of optimizing and testing the temporary back-to-back system, inter alia, because of the lack of record detail and because the cost of optimizing and testing a new, large system is likely higher than the cost of optimizing and testing a smaller, temporary back-toback system. We find, therefore, that the County has not met its burden to establish that \$15,200 is the reasonable and prudent cost for such optimization and testing and approve only the \$8,740 that Sprint contends is adequate for the optimization and testing of the back-to-back system.

d. **Drive Testing**

- 70. The Parties neither dispute the need for drive testing nor the cost that Motorola has quoted for conducting it. 160 Their dispute involves the need for both the County's staff (two employees) and RCC (one consultant) to monitor Motorola's work and later review the results.
- The County seeks \$38,400 for 480 hours of effort by the two County employees and one RCC consultant each of whom would spend 160 hours monitoring and participating in the pre- and postrebanding drive tests. 161 The County proposes 16 hours each for both the County and RCC to review the results of the drive test while Sprint contends that 16 hours for RCC and four hours for the County are adequate for this task. 162 Sprint deems \$6,880 adequate for 64 hours of effort by an RCC consultant and a single County employee, each of whom would spend 32 hours monitoring and participating in portions of the tests. 163
- Sprint Position. Sprint argues that the time allocated to Motorola in the Charles County's 72. cost estimate "includes all resources necessary to perform the drive testing, including a driver and personnel to run the testing equipment" and, therefore, that the request for 80 hours of effort on each drive test by both an RCC consultant and two internal staff members is unnecessary and should be reduced. 164 Sprint claims that its offer of 16 hours per person per test is sufficient for reasonable planning, oversight, coordination, and analysis of the test results. 165
- County Position. The County contends that the drive testing, and the resulting coverage 73. reliability that it ensures, "is arguably the single greatest determinant of whether or not a radio system is deemed useful and safe." While the County acknowledges that Motorola is responsible for conducting the overall testing, it argues that the testing requires both RCC and Licensee involvement as follows:
 - (1) "It like County will be involved with (i) a participant in the test vehicle to assist with driving/navigation and transmitting/receiving test calls with the 911 dispatcher and (ii) a dispatcher at the 911 Center to transmit/receive test calls with the field team;" and (2) "RCC will provide a technical participant for the test vehicle to oversee and validate the coverage test from a technical perspective." ¹⁶⁷

¹⁶⁰ Sprint PRM at 17.

¹⁶¹ Id., Appendix at 11-12. The Sprint PRW covers these tasks under six line items, two captioned as "ECC Pre-Rebanding CATP Participation," two captioned as "ECC Post-Rebanding CATP Participation," one captioned as "Pre-Rebanding Coverage Testing Oversight/Subcontractor Management/ECC Coordination," and one captioned as "Post-Rebanding Coverage Testing Oversight/Subcontractor Management/ECC Coordination."

¹⁶² *Id*.

¹⁶³ *Id*.

¹⁶⁴ *Id.* at 17.

¹⁶⁵ *Id*.

¹⁶⁶ Charles County Reply at 7.

¹⁶⁷ *Id*. at 7-8.

The County argues that its proposed approach "is fully consistent with the FCC's earlier approval of the tripartite planning and implementation process because it involves no duplication of effort." ¹⁶⁸

- 74. *Mediator Recommendation.* The Mediator recommends that the Commission find that the County is entitled only to the \$6,880 offered by Sprint for 64 hours of effort by RCC and the Licensee's internal staff. The Mediator notes that Motorola will actually be conducting the test under its drive testing protocol in which test transmissions generally take place while the test vehicle is parked. The Mediator therefore finds that having two individuals—one to drive and the other to conduct the test—is a clear case of duplication of effort. The Mediator also finds it unreasonable to have an additional technical consultant in the vehicle to oversee and validate every moment of the test drive, and deems it sufficient that RCC's staff member be present when the test vehicle is set up and tested, and when the protocol for testing is established and rehearsed. The Mediator also recommends that the Commission find that the County is entitled to 16 hours of the services of an RCC consultant and a County representative to analyze the test results, at a cost of \$4,000.
- 75. Decision. We agree with the Mediator's conclusions and the underlying rationale. In so doing, we are mindful that the retuning of the County's system involves only a relatively small change in its operating frequencies and that the far more significant determinants of coverage—site location, effective radiated power, antenna height and the terrain environment—will be unchanged post-rebanding. Therefore, even assuming that the County may have used two County employees and a consultant when its system was first constructed and drive tested, that does not support the County's contention that the same duplication of effort is required to verify comparability of coverage once the system is retuned.

e. BDA Testing

- 76. Charles County seeks \$5,000 to cover 40 hours for RCC and a County employee (20 hours each) to conduct pre- and post- rebanding coverage testing on five bidirectional amplifiers (BDAs) that are maintained in schools in the County to enhance in-building network coverage. The County's request is in addition to approximately 80 hours of Motorola's services to reconfigure the BDAs and "confirm" their operation. Sprint contends that the testing is unnecessary and that the \$5,000 should be disallowed. The services to reconfigure the standard bedisallowed.
- 77. *Sprint Position*. Sprint argues that the County is effectively proposing to use the TA's "Method III" coverage testing for the BDAs by verifying that the BDAs work throughout the school buildings before and after rebanding. The TA describes Method III coverage testing as the most complex and expensive method for determining comparable coverage, and notes that it is typically only

¹⁶⁸ *Id.* at 8 citing Charles County PFA MO&O, 22 FCC Rcd at 16774 ¶ 17.

¹⁶⁹ RR at 35.

¹⁷⁰ *Id*.

¹⁷¹ *Id*.

¹⁷² Id. at 35-36.

¹⁷³ *Id.* at 36.

¹⁷⁴ See Sprint PRM, Appendix at 11-12. This is covered in Sprint's PRW under two line items, each marked "Pre-Rebanding BDA Testing Oversight."

¹⁷⁵ *Id.*, Appendix at 4, 6. This is covered in Sprint's PRW under two line items, one marked "Remove BDA Filters and Confirm Operation" and another marked "BDA Filter Installation."

¹⁷⁶ *Id.*, Appendix at 11-12.

¹⁷⁷ Id. at 17.

appropriate for complex systems using simulcast technology or where extensive changes are made to the antenna and other transmission subsystem elements. ¹⁷⁸ Sprint claims that a BDA is analogous to a "simple, single site transmitter," which warrants only TA Method I testing. ¹⁷⁹ Sprint acknowledges that the filters for the BDAs will have to be modified to accommodate post-reconfiguration frequency assignments—work that is being performed by Motorola's subcontractor—but argues that the filter modifications do not involve any part of the BDAs' antenna systems and, therefore, there is no physical reason that coverage would be affected by the filter modifications. ¹⁸⁰

- 78. County Position. The County responds that Sprint has vastly oversimplified the reasons for coverage testing of the BDAs, observing that the filters for the BDAs will have to undergo significant modification. The BDAs currently operate in a relatively narrowband mode, passing only the six megahertz of the pre-rebanding NPSPAC portion of the 800 MHz spectrum (866-869/821-824 MHz). During the reconfiguration period, however, the BDAs will be required to pass the entire 800 MHz band, i.e., 18 megahertz of spectrum, in order to permit operation on both the pre- and post- rebanding frequencies (851-869/806-824 MHz). The country responds that Sprint has vastly oversimplified the reasons for coverage testing of the BDAs will have to undergo significant modification.
- 79. The County argues that the increased spectrum bandwidth that BDAs must pass during the reconfiguration period will create new opportunities for interference with BDAs by changing the "spectral landscape" within the relevant buildings. The County further claims that it conducted similar coverage testing to what it proposes here when the BDAs were initially installed in the schools. It argues that "[a]nything short of a pre- and post- rebanding indoor coverage test at these five facilities to validate BDA system comparability illustrates a cavalier, cross-your-fingers approach to determining critical indoor coverage comparability which never will be the manner in which Charles County treats its public safety radio system." ¹⁸³
- 80. *Mediator Recommendation.* The Mediator recommends that the Commission find that the County is not entitled to its requested funding for BDA coverage testing. The Mediator agrees with Sprint that the County is essentially requesting Method III coverage testing on devices that are analogous to individual non-simulcast transmitters and that conducting coverage testing on the BDAs following modification of the filters is unnecessary and unreasonable. The Mediator agrees with Sprint that the County is essentially requesting Method III coverage testing on devices that are analogous to individual non-simulcast transmitters and that conducting coverage testing on the BDAs following modification of the filters is unnecessary and unreasonable.
- 81. Decision. We concur with the Mediator's finding. The County is correct that "opening up" the bandwidth of the BDAs to 18 megahertz could expose them to additional, potentially interfering, signals from other services. Such interference, however, should be evident to the installers when the modified filters are installed. TA Method 1 testing, as recommended by Sprint, would disclose any material change in BDA power output as a consequence of installing the modified filters. In addition, to the extent that any interference is found, the County is entitled to compensation for the cost of interference abatement, which the County can obtain through a change order. Accordingly, we disapprove the cost of the unnecessary Method III coverage testing proposed by the County.

¹⁷⁸ The TA's coverage testing protocols are available on its website. *See* http://www.800ta.org/content/resources/Coverage_Testing_Fact_Sheet.pdf.

¹⁷⁹ Sprint PRM at 17-18.

¹⁸⁰ Id. at 17-18.

¹⁸¹ Charles County Reply at 8.

¹⁸² Id.

¹⁸³ *Id.* at 9.

¹⁸⁴ RR at 36.

¹⁸⁵ *Id*.

4. Global Management Services

- 82. In addition to the cost for management of the specific tasks discussed above, the County seeks \$531,969.80 for 2188.5 hours of overall project management services by Motorola, RCC, and its own personnel. Sprint contends that \$402,331.40 for 1527 hours of such additional management services is adequate. The \$129,638.40 difference between the County's request and Sprint's figure consists of \$19,250.00 in disputed Motorola costs, \$108,748.40 in disputed RCC costs, and \$1,640 in disputed internal costs. 187
- 83. Sprint Position. Sprint argues that \$402,331.40 is adequate because it is consistent with FRAs it has reached with other NCR licensees. It claims that the County's request is plainly excessive because the \$135,500 the County requests for the additional management services of RCC, alone, is more than the median total cost of project management services (\$116,717) for similarly-sized NPSPAC licensees. ¹⁸⁸
- 84. Sprint observes that Motorola acknowledges that its proposed program management costs are inconsistent with other projects, but that Motorola attempts to justify the higher costs as due to "the extensive order processing and tracking necessary for the temporary back-to-back system." Sprint, however, notes that Motorola had originally proposed to provide more than a half-million dollars of equipment for the back-to-back system, but is now only responsible for about \$12,000 of equipment, with the rest being supplied by Sprint. Sprint argues that the reduced amount of equipment supplied by Motorola should be matched with a corresponding reduction in program management effort.
- 85. *County Position*. The County characterizes Sprint's offer for project management as "wholly inadequate" and claims that the offer disregards the Commission's assurance in the *Charles County PFA MO&O* that it would afford "reasonable deference to a public safety licensee's decisions concerning internal staffing' and of the County's entitlement 'to decide how tasks will be apportioned between internal staff, RCC, and Motorola." The County acknowledges that the Commission cautioned against duplication of effort, but claims that Sprint has not argued in its PRM or during the mediation that there is duplication of program management effort. 193
- 86. The County also argues that rebanding "is an unprecedented challenge to the Public Safety licensees and the LMR industry in general" and, as a result, it "perceives a great deal of risk for its radio system stakeholders and citizenry" and therefore continues to believe that it is necessary to involve both Motorola and RCC "in a collaborative fashion throughout all critical junctures of the project." The County contends that the different skills and motivations that each of the three entities (Motorola, RCC, and itself) bring to the project complement each other and will ensure that reconfiguration is completed in a manner that will save money in the long run by avoiding schedule slippages, cost

¹⁸⁶ *Id.* at 22

¹⁸⁷ *Id*.

¹⁸⁸ Sprint PRM at 27.

¹⁸⁹ *Id*.

¹⁹⁰ Id.

¹⁹¹ Id. at 21, 27.

¹⁹² Charles County PRM at 9 quoting Charles County PFA MO&O, 22 FCC Rcd at 16772, 16775 ¶ 11, 22.

¹⁹³ *Id*.

¹⁹⁴ Charles County Reply at 15.

overruns, heightened risk, and customer dissatisfaction.¹⁹⁵ The County asserts that it approached the original construction of its 800 MHz system in this same manner.¹⁹⁶ The County also states that it continues to stand on Motorola's explanation that the higher program management hours are justified by the extensive order processing and tracking required for the temporary overlay system.¹⁹⁷

- 87. *Mediator Recommendation.* The Mediator recommends Charles County receive \$414,821.40 of the \$531,969.80 it requests to cover the program management efforts of Motorola, RCC, and its internal staff.¹⁹⁸ The Mediator notes that Charles County is requesting a level of management services that is four and a half times greater than the median project management cost of \$116,717 listed in the TA Metrics for similar sized NPSPAC systems at the time the Mediator prepared the RR. ¹⁹⁹ Specifically, the Mediator recommends reductions in the County's requested management services costs in two areas.
- 88. First, the Mediator finds that, although the County has demonstrated a need for a relatively significant level of project management services, it has not demonstrated why the management services hours of RCC should exceed the hours of Motorola. Motorola is tasked with a greater scope of work than RCC, yet RCC has requested similar hours for project management services—in this case, 773.5 hours for RCC as compared to 800 hours for Motorola. The Mediator notes that in the *Charles County PFA MO&O*, the Bureau, when it reduced the cost of RCC's management services, stated that it was "prepared to afford the County some flexibility with respect to budgeting for project management, provided the hours proposed are reasonable in proportion to the overall amount of planning hours proposed for the project." 202
- 89. The Mediator asserts that, because Charles County's costs for project management services are so high, it has a higher burden to demonstrate that the costs are reasonable and comply with the Commission's Minimum Cost Standard. The Mediator concludes that the County has not met this burden of proof and recommends that the Commission conclude that the County is justified in receiving only the level of effort for RCC that Sprint concluded was adequate, *i.e.*, \$62,517.40 to cover 274 hours of RCC's services.
- 90. Second, the Mediator concurs with Sprint that Motorola's management services estimate should be reduced by \$8,400 to reflect the fact that most of the equipment for the temporary back-to-back system is being supplied by Sprint, not Motorola as originally contemplated.²⁰³ The Mediator finds that Charles County failed to address the change in the scope of work for Motorola and therefore failed to meet its burden to demonstrate that the disputed \$8,400 in Motorola costs satisfies the Minimum Cost Standard.²⁰⁴

¹⁹⁵ *Id.* at 15-16.

¹⁹⁶ *Id.* at 16.

¹⁹⁷ *Id.* at 15.

¹⁹⁸ RR at 37.

¹⁹⁹ *Id.* The most recent TA Metrics show that the median project management cost has risen to \$135, 059, still far less than what the County proposes.

²⁰⁰ Id.

²⁰¹ *Id.* at 38

 $^{^{202}}$ Id. citing Charles County PFA MO&O, 22 FCC Rcd at 16774 \P 17.

²⁰³ Id.

²⁰⁴ *Id*.

- 91. *Decision.* We concur with the Mediator's recommendations. We note that every discrete task in the County's proposal has an associated project management cost, but that the County has "layered" onto those costs another \$400,000 for the overall management of the rebanding project. As noted in paragraph 5, *supra*, we now have experience with over 770 Stage 2 FRAs involving public safety systems, and give great weight to the TA Metrics that have been derived from those projects. When there is a significant disparity between the TA Metrics and the licensee's estimates—here, a more than fourfold difference—we look carefully at the record to see if the licensee's system is so materially different from the systems upon which the TA Metrics are based that we should approve the licensee's higher costs. In this case, we do not find evidence in the record of such a material difference.
- 92. The County's claim that its high overall management costs are attributable to the "processing and tracking for the temporary back-to-back system," are effectively refuted by Sprint, which points out that it is providing the majority of the back-to-back system—not Motorola as originally contemplated, thus obviating the need for extensive "processing and tracking." We find no merit in the County's contention that its extraordinarily high overall project management costs are justified because "there is a great deal of risk for its radio stakeholders and citizenry" associated with the rebanding of its system. Its claim is speculative, and inconsistent with the fact that other jurisdictions have pursued rebanding of their systems without the "risk premium" that the County seeks by quadrupling its overall project management costs.
- 93. Although the *Charles County PFA MO&O* approved the County's use of Motorola and RCC "in a collaborative fashion," that was not a license for the County to use the vendor and consultant to duplicate each other's functions and, thereby, to add a \$400,000 layer of overall project management costs on top of the costs already claimed for discrete elements of the rebanding project. The County's argument that this duplication of functions "will save money in the long run" is speculative—it is far from intuitive that its asserted need for duplicative functions will contribute any economies to the County's rebanding project.
- 94. With respect to the County's argument that the *Charles County PFA MO&O* stated we would afford "reasonable deference" to the County's decisions on how to deploy RCC, Motorola, and its own staff, we in fact do not deem it reasonable for the County to seek payment from Sprint for the unnecessary duplication of effort that characterizes its proposed rebanding project.
- 95. Finally, there is nothing that materially distinguishes the County's system from those on which the TA Metrics are based. On the contrary, we believe the County could have exercised more discretion in controlling its vendor and consultant costs. Accordingly, we cannot justify approving a proposal that deviates from the TA Metrics by a factor of over four. Thus, we find that the \$414,821.40 recommended by the Mediator for project management services reflects a reasonable sum for project management consistent with the Commission's Minimum Cost Standard.

5. Interoperability Coordination

96. The Parties dispute the proposed levels of effort of the County and RCC for participation in interoperability coordination with NCR members and adjacent jurisdictions. The County seeks \$111,000 to cover 888 hours of effort by RCC and County staff. Sprint claims \$25,300 is sufficient for

(continued....)

²⁰⁵ These project management costs are broken out as a subset of the Global Management Service costs. We disagree with the County that "Sprint has not argued in its PRM or during mediation that there is duplication of program management." Charles County PRM at 9 *quoting Charles County PFA MO&O*, 22 FCC Rcd at 16772, 16775 ¶ 11, 22. Indeed, Sprint has indicated that "[the added project management cost] is above and beyond the tremendous levels of project management and other professional services reflected in other cost categories, discussed above." *See* Sprint PRM at 27.

²⁰⁶ See Sprint PRM, Appendix at 14-17. The costs for interoperability coordination are included in Sprint's PRW under eight line items marked "National Capital Region Reconfiguration Implementation

314 hours of effort by the County and RCC. 207 The \$85,700 in dispute consists of \$9,700 in disputed internal costs, and \$76,000 in disputed RCC costs. 208

- 97. *Sprint Position.* Sprint objects to the "extensive" level of effort proposed by Charles County for interoperability coordination with NCR members and adjacent counties, arguing that the amount of time that Sprint has offered for interoperability coordination and planning is consistent with the time included in FRAs for other NCR members. Sprint also questions whether extensive coordination with Saint Mary's County is necessary given the fact that Saint Mary's County operates a M/A-Com system that is incompatible with Charles County's Motorola's system.
- 98. *County Position*. The County argues that it has created a high level of interoperability with neighboring jurisdictions, both with respect to exchanging trunked 800 MHz talk groups with neighboring counties and by creating interoperability using the five NPSPAC conventional mutual aid channels and the six NCR "RINS" channels.²¹¹ The County explains that it intends to work very closely with all of its interoperability partners throughout the rebanding process "to preserve the critical radio interoperability that has been created over the past three years."²¹²
- 99. The County also disputes Sprint's suggestion that extensive coordination with Saint Mary's County is unnecessary, arguing that Saint Mary's County "utilizes a handful of compatible Motorola/Charles County trunking radios for console and field interoperability purposes." The County further explains that "[t]he primary interoperability bridges with St. Mary's County are the NPSPAC conventional mutual aid subsystems." The County argues that coordination costs are affected more by the anticipated duration of the rebanding process in the NCR region, than by the technologies involved.
- 100. *Mediator Recommendation*. The Mediator recommends that the Commission find that the County is justified in receiving \$35,000 for 444 hours of internal effort and 64 hours of RCC effort for interoperability coordination. The Mediator acknowledges that, in the *Charles County PFA MO&O*, the Commission concluded that it was appropriate to give Charles County deference with regard to the level of effort necessary for interoperability coordination. The Mediator notes, however, that in the *Charles County PFA MO&O*, the Commission was addressing only the County's request for PFA funding to cover the interoperability coordination efforts of its internal staff and did not review RCC's interoperability coordination services during the planning phase because they were relatively small (20 hours for RCC as compared to 390 hours for the Licensee's staff) and were undisputed. The county is internal staff and did not review RCC.

Participation/Coordination" and eight line items marked "Southern MD Reconfiguration Implementation Participation/Coordination."

^{(...}continued from previous page)

²⁰⁷ Id.

²⁰⁸ *Id*.

²⁰⁹ See Sprint PRM at 28.

²¹⁰ *Id*.

²¹¹ See Charles County PRM, Ex. A at 1.

²¹² See id., Ex. A at 2.

²¹³ Charles County Reply at 14.

²¹⁴ See Charles County PRM, Ex. A at 1.

²¹⁵ RR at 39.

²¹⁶ Id. citing Charles County PFA MO&O, 22 FCC Rcd at 16776 ¶ 25.

²¹⁷ *Id*.

- 101. The Mediator states that, in neither the FRA mediation nor in its PRM, did Charles County explain why it was able to support interoperability coordination during the planning process with such a modest contribution by RCC, but now requires significantly more participation by RCC in the meetings with neighboring counties.²¹⁸ The Mediator therefore concludes that, although the County has met its burden of proof under the Minimum Cost Standard with respect to the proposed interoperability coordination costs for its internal staff, it has not met its burden with respect to RCC's proposed costs.²¹⁹ The TA Mediator therefore recommends that the Commission find that the County is entitled to its entire request of \$22,200 to cover its internal costs, but only the \$12,800 that Sprint contends is adequate for RCC's services.²²⁰
- 102. In its Statement of Position, the County states that the elevated costs of RCC during the FRA portion of rebanding reflect the extended time required for rebanding coupled with the increased need for reliance on RCC's technical expertise during rebanding. Specifically, the County argues that during implementation, radio programming logic must be reconstructed and "cooked" so that radios across the NCR and Southern Maryland will continue to interoperate. The County argues that ensuring that shared system logic stays intact will require a high level of cooperation among jurisdictions. It also emphasizes that reprogramming logic exchange will be a big part of interoperability meetings because scheduling information will have to be exchanged to ensure successful synchronization across the region. The County contends that one RCC employee is solely assigned to Charles County and has been tasked with seeing the entire rebanding initiative through from beginning to end. The County concedes, however, that the RCC employee's expertise may not be as necessary during the period when radios are operating on their new channels and are having their old channels removed and states that it is willing to negotiate a reduction in RCC hours for this period.
- 103. Decision. We are not persuaded by the County's argument in support of the elevated costs of RCC's services. We note that the County raised this argument only after the RR had been filed, thus contravening the directive of Section 90.677(d), which requires a complete record be filed with the Bureau for *de novo* review, as well as depriving Sprint of an opportunity to respond. Looking to the record, we conclude that 64 hours of RCC's services are sufficient for RCC to evaluate the code, and that the other aspects of the task, such as code exchange and scheduling, do not require enhanced levels of technical expertise and may readily be accomplished within the cost requested for the County's internal services. Therefore, we concur with the Mediator and find that Charles County is justified in receiving \$35,000 of funding to cover 444 hours of internal effort and 64 hours of RCC effort for interoperability coordination.

6. Training Contingency

104. The Parties originally disputed Charles County's proposal to include a contingency in the FRA of \$87,500 to cover 500 hours of effort if staffing shortages force Motorola to use subcontractors on

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    218 Id. at 40.
    219 Id.
    220 Id.
    221 Charles County SOP at 7-8.
    222 Id.
    223 Id. at 8.
    224 Id.
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²²⁵ 47 C.F.R. § 90.677(d).

the project that are perceived as less skilled and in need of additional supervision and training.²²⁶ Subsequently, however, the Parties agreed to rely on the change order process to cover this contingency,²²⁷ and we therefore make no finding on this issue.

IV. CONCLUSION

- 105. Our decision today follows the Commission's mandate that 800 MHz band reconfiguration must be accomplished at the minimum necessary cost consistent with providing licensees with comparable facilities. We further emphasize that at this late stage in the rebanding process, and in light of the substantial cost data that underlie the TA Metrics, we intend to rely increasingly on the TA Metrics as a baseline for determining the reasonability of costs. Licensees claiming costs significantly in excess of the metrics for comparable systems face a high burden of justification. Applying this standard to the present case, we find that Charles County has not met this burden with respect to certain of its cost claims, although we note that even the costs we have approved still exceed the metrics for comparable systems by a substantial margin. ²²⁹
- 106. We direct the Transition Administrator to convene a meeting between Charles County and Sprint within seven days of the release date hereof to conclude an FRA consistent with the costs we have approved herein. For ease of reference we summarize the approved costs below:
 - \$444,963 for Motorola's efforts to reconfigure Charles County's 800 MHz infrastructure;
 - \$13,111.60 for RCC's efforts for infrastructure retuning;
 - \$635,384.40 for Motorola's management services associated with subscriber unit retuning;
 - \$256,143 for RCC and internal costs associated with the management of the subscriber unit retuning;
 - \$1,520 for functional testing of the fire station alerting feature;
 - \$48,450 for Motorola's site testing services;
 - \$8,740 for the optimization and testing of the back-to-back system;
 - \$6,880 for by RCC and the Licensee's internal staff support of drive testing:
 - \$414,821.40 in global project management services; and
 - \$35,000 of funding to cover internal effort and RCC effort for interoperability coordination.

V. ORDERING CLAUSES

- 107. Accordingly, pursuant to the authority of Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. \S 154(i) and Section 90.677 of the Commission's Rules, 47 C.F.R. \S 90.677, IT IS ORDERED that the issues submitted by the Transition Administrator are resolved as discussed above.
- 108. IT IS FURTHER ORDERED that the Transition Administrator shall convene a meeting of the parties within seven business days of the date of this *Memorandum Opinion and Order* for the purpose of negotiating a Frequency Reconfiguration Agreement consistent with the resolution of issues set forth herein.

²²⁶ Sprint PRM at 24 citing Charles County PRM, Ex. B at 3.

²²⁷ Charles County SOP at 8.

²²⁸ See supra \P 4.

²²⁹ In this order we approve \$1.865 million in disputed costs. This amount alone is 85 percent greater than the median total cost of reconfiguring a comparable system.

109. This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission's rules, 47 C.F.R. §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

David L. Furth Deputy Chief Public Safety and Homeland Security Bureau