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

In the Matter of	)	
	)	
Arizona Public Service Company	)	WT Docket No. 02-55
	)	
and	)	Mediation No. TAM-45010
	)	
Nextel Communications, Inc.	)	

MEMORANDUM OPINION AND ORDER

Adopted: March 10, 2015 **Released: March 10, 2015**

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

I. INTRODUCTION

1. Under consideration is a Recommended Resolution,[1] filed September 8, 2014 by the 800 MHz Transition Administrator (TA) TA Mediator, of a dispute between the Arizona Public Service Company (APSC or Licensee) and Nextel Communications, Inc. (Sprint)[2] arising from the negotiation of a Frequency Reconfiguration Agreement (FRA) between APSC and Sprint. In this *Memorandum Opinion and Order*, we generally concur with the TA Mediator and find that, in most respects, APSC has failed to meet its burden of proof to demonstrate that its estimate of the cost to reband its 800 MHz communications system meets the Commission's well-established Minimum Necessary Cost Standard.

II. BACKGROUND

2. The *800 MHz Report and Order* and subsequent orders in this docket require Sprint to negotiate a FRA with each 800 MHz licensee subject to rebanding.[3] The FRA must provide for retuning of the licensee's system to its replacement channel assignments at Sprint's expense, including the expense of retuning or replacing the licensee's radio units as required.[4] If a licensee and Sprint are unable to negotiate a FRA, they enter mediation under the auspices of a TA-appointed mediator.[5] If the parties do

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[1] TA Recommended Resolution, Mediation No. TAM-45010, filed September 8, 2014 (RR).

[2] For uniformity in 800 MHz rebanding matters, we refer to wholly owned Sprint subsidiaries, such as Nextel Communications, Inc., by the name of their parent company, Sprint Corporation.

[3] *See* Improving Public Safety Communications in the 800 MHz Band, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order*, 19 FCC Rcd 14969, 15075-77 (2004)(*800 MHz Report and Order*); Improving Public Safety Communications in the 800 MHz Band, *Supplemental Order and Order on Reconsideration*, 19 FCC Rcd 25120 (2004)(*800 MHz Supplemental Order*); Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, 20 FCC Rcd 16015 (2005).

[4] *800 MHz Report and Order*, 19 FCC Rcd at 14977, ¶11.

[5] The 800 MHz Transition Administrator (TA) oversees negotiation and implementation of 800 MHz rebanding and provides mediation services when disputes arise between licensees and Sprint over the cost or other aspects of rebanding. *800 MHz Report and Order* 19 FCC Rcd at 14986 ¶ 27.

not reach an agreement in mediation, the mediator forwards the mediation record and a recommended resolution to the Public Safety and Homeland Security Bureau (Bureau) for *de novo* review.[6]

3. APSC is a public utility located in the State of Arizona that provides electrical power generated by both conventional and nuclear sources throughout most of Arizona and portions of New Mexico.[7] Its system consists of 29 Motorola IntelliRepeater multicast sites and one simulcast system (consisting of three simulcast RF sites) connected to a master site through digital microwave and fiber links.[8] APSC also operates a multisite IPMobileNet wireless data network.[9] In addition to the 29 IntelliRepeater multicast sites, there are ten pole top repeater sites.[10] APSC states that five of the multicast sites, three of the pole top repeater sites, and approximately 3,100 subscriber radios must be reconfigured as part of the 800 MHz rebanding process.[11]

4. The *800 MHz Report and Order* requires APSC to relocate its system within the 800 MHz band at Sprint's expense.[12] APSC submitted its cost estimation (Statement of Work or SOW) to Sprint on April 18, 2014.[13] Although APSC operates a Motorola system, it chose Motorola competitor, Harris Corporation (Harris) to reband its system. It proposes that Federal Engineering (Federal) manage the project.[14] The SOW proposed a cost of $2.67 million and, in addition, specified that Sprint would provide replacement infrastructure equipment (combiners, duplexers, and a pre-selector), and cables and computer hardware.[15]

5. The parties opened formal negotiation of an FRA on April 24, 2014.[16] The negotiation period ended on May 25, 2014 and the mediation period was scheduled to conclude on June 23, 2014.[17] The parties had limited exchanges prior to June 13, 2014. On June 17, 2014, in response to the urging of the TA Mediator, Sprint submitted a counteroffer that proposed reducing the overall project cost by more than half, primarily by estimating what Sprint believes rebanding APSC's system would cost if the work were performed by Motorola and its affiliated service shops instead of by Harris.[18]

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[6] The *800 MHz Report and Order* originally provided for referral and *de novo* review of unresolved mediation issues by the Public Safety and Critical Infrastructure Division of the Commission's Wireless Telecommunications Bureau. *800 MHz Report and Order*, 19 FCC Rcd at 15075 ¶ 201. However, the Commission has since delegated this authority to the Public Safety and Homeland Security Bureau. *See* Establishment of Public Safety and Homeland Security Bureau, *Order*, 21 FCC Rcd 10867 (2006).

[7] *See* RR at 2.

[8] *Id.*

[9] *Id.*

[10] *Id.*

[11] Proposed Resolution Memorandum of Licensee dated August 7, 2014 (APSC PRM) at 2.

[12] *800 MHz Report & Order*, 19 FCC Rcd at 14977, ¶ 11.

[13] *See* RR at 2.

[14] *Id.*

[15] *Id.*

[16] *Id.*

[17] *Id.* at 3.

[18] *Id.*

6. Despite an extension of the mediation period through July 17, 2014, and the extensive involvement of the TA Mediator, the parties were unable to agree.[19] Toward the end of the mediation period, Sprint submitted a rebanding quote from Creative Communications of Phoenix, Arizona (the Creative Quote), accompanied by an email containing the assumptions that Sprint had provided to Creative to assist in preparing the quote.[20] The Creative Quote was significantly lower than Sprint's previous estimate of the amount that Motorola would charge for rebanding APSC's system, thus widening the gulf between the Parties.[21]

7. During the final mediation call, the TA Mediator and the Parties developed a proposed schedule for the submission of Proposed Resolution Memoranda (PRM).[22] APSC filed its PRM on August 7, 2014,[23] and subsequently Sprint filed its PRM on August 18, 2014.[24] Sprint successfully petitioned the mediator for leave to respond to new information presented by APSC in its Reply PRM, and as a result Sprint filed a Surreply on August 29, 2014.[25] The TA Mediator issued a Recommended Resolution on September 8, 2014.[26] On September 22, 2014, the parties filed their statements of position with the Bureau.[27] On November 3, 2014, at the direction of the Bureau, the TA Mediator submitted a Supplemental Appendix containing a cost metrics report.[28]

A. Relevant Legal Standards

8. The Commission has stated that relocating licensees are entitled to reimbursement of "any reasonable and prudent expense directly related to the retuning of a specific 800 MHz system,"[29] and that the relocating licensee must certify that "the funds requested for reconfiguration are the minimum necessary to provide facilities comparable to those presently in use."[30] The licensee bears the burden of proof to show that its claimed expenses meet the minimum necessary cost standard.[31]

9. The Commission has clarified that minimum cost does not mean the absolute lowest cost, but rather "the minimum cost necessary to accomplish rebanding in a reasonable, prudent and timely manner"

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[19] *Id.*

[20] *Id.*

[21] *Id.*

[22] *Id.* at 4.

[23] *See* APSC PRM.

[24] *See* Proposed Resolution Memorandum of Sprint Corporation dated August 18, 2014 (Sprint PRM).

[25] See Surreply of Sprint Corporation dated August 29, 2014 (Sprint Surreply).

[26] *See* RR.

[27] *See* Statement of Position of Arizona Public Service Company, filed September 22, 2014 (APSC SOP); Statement of Position of Sprint Corporation, filed September 22, 2014 (Sprint SOP).

[28] Transmittal of Supplement to the Record and Request for Confidential Treatment, Mediation No. TAM-45010, filed November 4, 2014.

[29] *800 MHz Supplemental Order*, 19 FCC Rcd at 25152, ¶ 71.

[30] *800 MHz Report and Order*, 19 FCC Rcd at 15074, ¶ 198.

[31] *See* Wireless Telecommunications Bureau Announces Procedures for *De Novo* Review in the 800 MHz Public Safety Proceeding, WT Docket 02-55, *Public Notice,* 21 FCC Rcd 758 (WTB 2006).

(Minimum Necessary Cost Standard).[32] The Commission, however, has cautioned that, even with this clarification:

> Sprint should not propose to pay and the TA should not approve payment of higher costs when a lower-cost alternative is clearly available that would provide the Licensee with comparable facilities as defined by the Commission's orders in this proceeding and would effectuate a smooth and timely transition.[33]

The Commission has further clarified that Sprint is not obligated to make any payment in those cases in which a licensee seeks funding for activities that are not "necessary." Thus, for example, in the *IPSAN MO&O* , the Bureau found that Sprint was not obligated to pay costs related to finding a new vendor to conduct a "second touch,"[34] and associated mediation costs, because neither activity was "necessary" to the rebanding of the licensee's system at minimum necessary cost.[35] Similarly, in the *Maryland MO&O*,[36] the Bureau denied a licensee's claim for the expense of drive testing because it was not "necessary or germane to ensuring that Maryland receives comparable facilities as provided by the *800 MHz R&O*."[37]

10. It is well established that a licensee may use the rebanding vendor of its choice, except when the licensee's choice conflicts with the Minimum Necessary Cost Standard. Thus, in the *State of Indiana and Sprint Nextel* case,[38] the licensee proposed that its licenses be modified by vendor "EMR" at a cost twice that quoted by vendor "EWA." The Bureau stated, and the Commission affirmed:

> We do not, however, require Indiana to use EWA or any similar provider. We hold only that EMR's initial $200,200 quote and its later $100,000 quote are excessive as evidenced by the fact that EWA would do the work for a little more than one-half the price quoted by EMR.[footnote omitted]. * * * If the State wishes to use EMR to enter the data necessary to modify its licenses, it may do so. We hold only that Sprint's responsibility for that work is limited to $51,590.[39]

Accordingly, we have evaluated APSC's claims against the foregoing precedent and, for the most part, found them wanting.

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[32] Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, 22 FCC Rcd 9818, 9820 ¶ 6 (*Cost Clarification Order).*

[33] *Id.* at 9821, ¶ 11.

[34] A "touch" is industry terminology for the process of retuning a radio.

[35] Illinois Public Safety Agency Network and Sprint Nextel*, Memorandum Opinion and Order*, 26 FCC Rcd 4061, 4067, ¶¶ 17-18(PSHSB 2011)(*IPSAN MO&O).*

[36] State of Maryland and Sprint Nextel*, Memorandum Opinion and Order*, 21 FCC Rcd 11939 PSHSB 2006)(*Maryland MO&O).*

[37] *Id.* at 11941, ¶¶ 10-11.

[38] State of Indiana and Sprint Nextel, *Memorandum Opinion and Order*, 26 FCC Rcd 1023 (PSHSB 2011), *petition for reconsideration denied*, *Memorandum Opinion and Order*, 26 FCC Rcd. 5067 (PSHSB 2011) *aff'd* 27 FCC Rcd 11469 (2012)(*Indiana MO&O).*

[39] *Id.*at 1032, ¶ 33.

B. Issues in Dispute

11. The parties agree that APSC must retune all of its radios as part of its rebanding and that each radio will require two touches.[40] However, APSC requests $1.8 million to retune its subscriber units, while Sprint proposes to pay $803,000 to accomplish this task.[41]

1. Choice of Harris as the Principal Rebanding Vendor

12. APSC seeks to employ Harris to retune its system, even though its system is predominately a Motorola system.[42] APSC contends that Harris has rebanded many systems throughout the United States, many of which incorporate Motorola equipment as part of a larger overall Harris system.[43] In addition, APSC argues that Harris has assembled a team including individuals who were directly involved in the original deployment of APSC's system, and therefore have unique knowledge of APSC's system design and requirements.[44] APSC also speculates that, because of the heavy demands that rebanding has imposed on Motorola's resources in Arizona, Motorola may not have sufficient manpower available timely to reconfigure APSC's system.[45]

13. Sprint opposes the use of Harris. It notes that APSC has not offered a single example of another rebanding in which Harris has reconfigured a predominantly Motorola system.[46] Furthermore, Sprint contends that Motorola has sufficient capacity in Phoenix and the surrounding areas to reconfigure APSC's system, and it offers the Creative Quote as an example.[47]

14. The TA Mediator notes that the Commission has accorded licensees wide discretion in how they proceed with rebanding, including whether to use their own resources or the services of outside managers and vendors, and which vendors licensees choose to employ.[48] In addition, the TA Mediator notes that Sprint's obligation to pay rebanding costs is governed (a) by the requirement that licensees be provided with facilities comparable to those existing before rebanding and (b) by the Minimum Necessary Cost Standard.[49] The TA Mediator makes no finding as to whether APSC should use Harris, but it recommends that the Bureau find that APSC has not met its burden of demonstrating that its cost estimate satisfies the Minimum Necessary Cost Standard.[50]

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[40] RR at 7.

[41] *Id.*

[42] APSC PRM at 5-6.

[43] *Id.*

[44] *Id.*

[45] *Id.*

[46] Sprint PRM at 18.

[47] *Id.* at 8; Sprint Surreply Ex. A.

[48] RR at 8 (citing City of Naperville, IL and Sprint Nextel*, Memorandum Opinion and Order,* 22 FCC Rcd 10971, 10974, ¶ 12 (2007)).

[49] RR at 8-9.

[50] RR at 4.

2. APSC'S Proposal and the Minimum Necessary Cost Standard

a. Relevance of Previous Harris FRAs

15. APSC argues that its proposal meets the Minimum Necessary Cost Standard, because it incorporates a methodology that Harris has utilized in numerous other approved FRAs including that of Consumer's Energy (Consumers) and the Florida Statewide Law Enforcement Radio System (FSLERS).[51] APSC contends that its SOW has similar average daily costs for technicians as the systems *supra*. Thus, APSC proposes a technician cost of $2,085.98 per day, whereas Consumers' FRA specified $2,104.02 per day and FSLERS' FRA specified $2,074.73 per day.[52] APSC proposes the same production rate as these latter two licensees, *i.e.,* 16 radios per day based on a 10 hour working day.[53]

16. Sprint contends that the rebanding of these Consumers and FSLERS systems cost more than what is necessary to reband APSC's system. In Consumers' case, the system rebanded was a Harris EDACS system—not a Motorola system such as APSC's—and a large number of repeaters had to be replaced.[54] Moreover, Sprint states, the overall cost of rebanding the Consumers system was approximately half of what APSC is asking for rebanding its system. In the case of FSLERS, there were no Motorola trunking repeaters or subscriber radios to be retuned—the FSLERS system was predominantly a Harris system.[55] Sprint posits that the APSC cost estimate is so high, because Harris lacks substantial expertise and experience in retuning Motorola equipment.[56]

17. The TA Mediator notes that the FRAs that APSC used for comparison were not subjected to Commission review and that the Commission has stated that, in considering comparisons between rebandings, it is not bound by un-reviewed cases in which the facts and circumstances often differ.[57] The TA Mediator, agrees with Sprint that because the FRAs APSC offered as comparable to the SOW were either completely or predominantly Harris EDACS systems, they are not a suitable basis for comparison. Accordingly, the TA Mediator recommends that the Commission find that the FRAs cited by APSC are inapposite and does not support APSC's claimed costs.[58]

b. Sprint's Counter Offer

18. Sprint's counteroffer to the APSC SOW stemmed from its view that APSC's costs are inflated because Harris has limited experience in rebanding Motorola systems and would have to rely heavily on Harris personnel brought in from outside Arizona to supplement its resources, thereby unnecessarily increasing travel and per diem costs.[59] Sprint therefore proposes travel and per diem costs equivalent to those that would be charged by a local Motorola shop.[60] Sprint also contends that the cost

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[51] RR at 9.

[52] *Id.*

[53] *Id.*

[54] Sprint Surreply at 4.

[55] *Id.*

[56] RR at 10.

[57] RR at 11 (citing City of Houston, TX, Public Works Department and Sprint Nextel; City of Houston, TX, Police Department and Sprint Nextel*, Memorandum Opinion and Order,* 24 FCC Rcd 4655, 4660-61, ¶ 20 (2009)).

[58] RR at 11.

[59] *Id.*

[60] RR at 11 (citing Sprint PRM Ex. 1).

of retuning radios should be reduced to the level of effort that would apply had the Licensee agreed to a Subscriber Equipment Deployment (SED) agreement, whereby APSC's radios would have been retuned before infrastructure reconfiguration and pursuant to an agreement separate from an FRA.[61] Although an SED was not considered by the parties, Sprint contends that historical SED levels of effort in other rebandings have been a benchmark for subscriber costs, and that there is no difference in the retuning process between radios reconfigured pursuant to an SED and radios reconfigured pursuant to a traditional FRA.[62]

19. After both APSC and the TA Mediator observed that Sprint had not offered an alternative Motorola quote for rebanding APSC's system, Sprint obtained the Creative Quote.[63] When Sprint asked Creative for a rebanding quote Sprint did not identity APSC as the prospective client. Instead Sprint provided Creative with some basic information about the proposed work:

- Eight mountain top sites (including three pole top sites),
- Motorola Qantar repeaters,
- 1,256 Motorola portables,
- 1,933 Motorola mobiles (including 230 modems),
- Three IP MobileNet base units and associated computer hardware and cables required,[64]
- Three replacement duplexers and one combiner.

Sprint informed Creative that the work would take place at 14 retuning locations (each having stated quantities of radios plus certain additional radios).[65] In addition Sprint requested that Creative's quote include its "normal testing procedures," as well as normal project management, scheduling, coordination and oversight. [66]

20. Sprint does not contend that the Creative Quote is binding on APSC, but rather that the Creative Quote vindicates Sprint's estimate of subscriber reconfiguration costs (*i.e.,* Sprint claims that its estimated retuning costs—as contained in its counteroffer—are representative of what Motorola would charge).[67]

21. APSC criticizes numerous aspects of the Creative Quote. First, it notes that the Creative Quote does not include many of the services that Harris will perform under the SOW. APSC also argues that Sprint provided Creative with an inadequate description of the project which led to an understated quote. These include:

- The use of only fourteen retuning sites as opposed to the 50 locations set out in the SOW

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[61] *Id.*

[62] RR at 11 (citing Sprint Surreply at 23).

[63] RR at 11.

[64] RR at 12 (citing Sprint PRM , Ex. 2).

[65] *Id.*

[66] *Id.*

[67] RR at 12 (citing Sprint PRM at i).

- The use of a local radio dealer to provide project management instead of the equipment. manufacturer (either Harris or Motorola)
- A lack of specificity concerning the exact types of radios to be retuned[68]

22. Further, APSC provides a letter from a consulting engineer with a background in Motorola retuning practices who, APSC claims, identifies a number of additional shortcomings with the Creative Quote, including, (a) failing to provide an allowance for radios not delivered on time to retuning stations (Missing in Action (MIA) Radios), (b) failing to provide for the rebuilding in the field of certain code plugs in the subscriber radios, and (c) failing to account for travel time, which results in less time for rebanding technicians at the rebanding locations.[69]

23. APSC also provides an email from counsel to Creative, which email states that now that Creative was aware of the purported client and the distribution of the radios associated with APSC's system, Creative would need to revisit the proposal it previously provided to Sprint, in particular with respect to mobilization and project management time estimates and level of engineering review.[70]

24. The TA Mediator recommends that the Commission find that that the Creative Quote is not dispositive of the amount the Commission determines Sprint should pay for the rebanding of the APSC system. The TA Mediator finds, however, that the Creative Quote establishes that APSC has not met its evidentiary burden of showing that the subscriber retuning costs contained in its SOW meet the Commission's Minimum Necessary Cost Standard. Referring to the *Indiana MO&O* decision, *supra,*[71] where the Commission used a competing quote as a proxy for the existence of a significantly less expensive alternative, the TA Mediator recommends that the Commission reach the same conclusion here, *i.e.* ,that a less expensive alternative to APSC's proposal exists.[72]

25. The TA Mediator concludes that APSC has failed to meet its burden of proof to show that its proposed subscriber reconfiguration costs satisfy the Minimum Necessary Cost Standard, because not only are the FRAs that APSC offered as examples dissimilar to APSC's circumstances, they are also unreliable because they were not reviewed by the Commission; further, Creative Quote demonstrates that a less expensive rebanding alternative exists. [73] Accordingly, the TA Mediator recommends that the Commission find that the costs proposed by Sprint, adjusted as discussed in the sections below, satisfy the Minimum Necessary Cost Standard.

3. Specific SOW Issues

26. The TA Mediator addresses whether certain specific tasks proposed in the APSC SOW meet the Minimum Necessary Cost Standard. We discuss these issues below.

27. *Code Plug Rebuilds.* APSC contends that it must account for the possibility that up to 25 percent of its subscriber radios will require code plug rebuilds in the field.[74] Sprint responds that, in its

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[68] RR at 12 (citing APSC PRM at 48-57).

[69] RR at 12 (citing APSC PRM, Ex. 2).

[70] RR at 12-13(citing APSC PRM, Ex. 1).

[71] See *supra* n. 38.

[72] RR at 13.

[73] *Id.* at 13-14.

[74] RR at 14 (citing APSC PRM at 29-31).

experience, less than one percent of radios would require such work.[75] APSC states that it bases its estimate on the fact that it lacks central records for the code plugs for approximately 25 percent of its subscriber radios.[76] The TA Mediator finds that, because APSC could not provide a more precise estimate of the number of radios that may require code plug rebuilding in the field, the Commission should not allow additional time for code plug rebuilding in the FRA. Instead, the TA Mediator recommends that if the Commission finds that if APSC can document the need for extensive code plug rebuilding, during rebanding, that the TA should approve a change order for the additional work.[77]

28. *MIA Radios.* In the SOW, APSC includes a 10 percent allowance for additional programming time to account for the programming of "MIA" radios (*i.e.*, those radios not brought to the programming centers on schedule). APSC claims to base this estimate on Harris's experience with other rebanding projects.[78] Sprint argues that APSC should have incorporated this contingency into its original quote, which Sprint claims to have done in the SED level of effort that it proposes be used instead of the APSC SOW to estimate radio retuning costs.[79] The TA Mediator recommends that the Commission find that if a significant number of radios are not available when needed for programming, resulting in additional programming time, APSC should expressly be permitted to document those additional costs in a change notice.[80]

29. *Motor Homes.* APSC proposes to rent two motor homes for the duration of each touch. These vehicles would be driven to each of the retuning locations to serve as mobile work places.[81] APSC states that it needs to use the vehicles, because it is unable to assure that suitable workplaces for subscriber retuning will be available at a number of the programming locations. APSC argues that using the vehicles will reduce costs by allowing easier access to vehicles for retuning at remote locations, providing climate controlled workplaces in a very hot climate, and avoiding the need for repetitive tear down and set up of equipment.[82]

30. Sprint opposes the motor home proposal. It notes that APSC has not specifically denied that it has no facilities where retuning can be conducted; merely, it cannot assure that such facilities will be available.[83] Sprint notes that it has never previously been asked to pay for motor homes, even in much larger rebandings, and that usually vendors make use of their own trucks or tents to support subscriber reconfiguration when and where needed.[84]

31. The TA Mediator recommends that the Commission find that the Licensee has not met its burden of demonstrating that the rental of two motor homes is consistent with the Minimum Necessary Cost Standard. The TA Mediator notes that the logistical issue of providing a location where radios can be rebanded is part of every rebanding and that APSC does not provide any examples of rebandings in

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[75] RR at 14 (citing Sprint PRM at 21).

[76] RR at 14 (citing APSC Reply PRM at 8).

[77] RR at 15.

[78] RR at 15.

[79] *Id.*

[80] *Id.*

[81] RR at 15 (citing APSC PRM at 27-28).

[82] RR at 16 (citing APSC PRM at 28).

[83] RR at 16 (citing Sprint PRM at 17-18).

[84] *Id.*

which motor homes have been used to meet this need. Moreover, the TA Mediator notes that APSC does not claim that it is unable to provide a rebanding work area, only that it is unable to affirmatively promise that such facilities will be available at every location.[85]

32. *Harris Staffing.* APSC argues that a Quality Assurance Manager, employed by Harris, should be on site throughout the reprogramming of the subscriber radios.[86] APSC notes that the Harris candidate it proposes has extensive experience with rebanding software for the Licensee's equipment, code plug rebuilds, and was involved in the original deployment of the Licensee's system.[87]

33. APSC proposes that the Quality Assurance Manager would work directly for the Harris Project Manager, and would be Harris's interface with the APSC point of contact. The Quality Assurance Manager would also provide on-site supervision of programming teams and coordinate their work with various organizations within APSC. The Quality Assurance Manager would also assure that APSC's schedule and project requirements are met and would assist in setting up and tearing down equipment as necessary.[88]

34. APSC also proposes that Harris provide a System Engineer to program the PCs to be used in subscriber retuning, conduct code plug review, attend primary planning meetings, and assist in the setup of equipment for each touch. The proposed System Engineer is reported to have provided technical oversight for the original deployment of APSC's system.[89] Sprint contends that having both a Quality Assurance Manager and System Engineer is unnecessary and duplicative, and it requests eliminating the functions proposed for the System Engineer.[90] Nevertheless, the TA Mediator notes that the Commission approved use of a System Engineer in a similar rebanding case[91] and, therefore, recommends that the Commission find that use of a System Engineer here is reasonable; hence, the Commission should add $26,364,—the proposed cost of the System Engineer,—to whatever amount it decides is the minimum cost for rebanding the APSC system.[92]

35. *Computer Services.* APSC maintains that various computer services must be provided to accommodate APSC's requirement that computers used for rebanding must be "locked down," *i.e.*, isolated from the Internet and outside network connections to avoid unauthorized access and that technicians use APSC-provided programming software.[93] APSC also proposes that, in addition to programming the PCs, the technicians are required to maintain a computer database reflecting the progress of subscriber work.[94]

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[85] RR at 16.

[86] RR at 16-17 (citing APSC PRM at 24-25).

[87] *Id.* at 17.

[88] *Id.*

[89] *Id.*

[90] RR at 17 (citing Sprint PRM at 18-19).

[91] RR at 17 *(*citing Mississippi State University and Nextel, *Memorandum Opinion and Order,* 28 FCC Rcd 11207 (PSHSB 2013)(*MSU MO&O)* at 11230, 11233, ¶¶ 66,75).

[92] RR at 17.

[93] RR at 18 (citing APSC PRM at 29-30).

[94] *Id.* (citing APSC PRM at 30-31).

36. Sprint opposes APSC's proposal to have computer technicians install the APSC-provided software, arguing that the proposal reflects Harris's inexperience with Motorola equipment. Sprint also submits that having Harris computer technicians maintain a progress database is unnecessary and that the retuning technicians can record progress on a spreadsheet as part of the retuning effort.[95]

37. The TA Mediator recommends that the Commission find that the Licensee's request for computer set up time is reasonable, because the PCs used for programming must be "locked down" and that only the rebanding software provided by the Licensee may be used to perform the rebanding work.[96] Accordingly, the TA Mediator recommends that the Commission allow $4,200—as proposed by APSC—for computer set-up time.[97] However, the TA Mediator does not believe that funding for database development is warranted, because the technicians performing subscriber work can record what they have done on spreadsheets within the time allotted for the general retuning of the radios.[98]

38. *Licensee Internal Costs.* APSC proposes 0.5 hours per radio per touch for services by its employees in connection with subscriber reconfiguration. These services consist of "coordination with the reconfiguration vendor and APSC users, issue resolution, template variations, etc."[99] This totals 1,515 hours per touch or 3,030 hours in total. The cost to Sprint would be $284,000 at a labor rate of $93.75 per hour. APSC also proposes 336.5 hours at a rate of $97 per hour for managing the participation of its employees in the rebanding effort.[100]

39. Sprint proposes to allocate APSC employees only 152 hours (one hour per day for 152 days) for day-to-day reconfiguration tasks. Sprint argues that although allocating 30 minutes for securing a location for rebanding and possible follow-on resulting from schedule changes might be warranted, but 30 minutes per radio is not.[101]

40. Sprint proposes to allocate APSC 44 hours (two hours per week for 22 weeks) for APSC's management of its employees' rebanding efforts claiming that this rate is more representative of the costs Sprint encounters when a licensee relies on a vendor to do retuning work.[102]

41. The TA Mediator agrees with Sprint that making radios available for retuning should not be priced on a per radio basis, but rather on a per day basis and recommends that the Commission find that APSC has not adequately justified its internal time under the Minimum Necessary Cost Standard.[103] However, the TA Mediator does not believe a single hour per day is sufficient, given that there will be two separate programming teams working simultaneously at two different locations during most of the subscriber reconfiguration process.[104] The TA Mediator therefore recommends that the Commission find

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[95] RR at 18.

[96] *Id.*

[97] *Id.*

[98] *Id.*

[99] RR at 19 (citing APSC PRM at 31).

[100] *Id.*

[101] RR at 19 (citing Sprint PRM at 19).

[102] *Id.* (citing Sprint PRM at 26).

[103] RR at 20.

[104] *Id.*

that the one hour per day proposed by Sprint should be doubled for a total of 304 hours at $93.75 per hour ($28,500).[105]

42. The TA Mediator recommends that the Commission find that Sprint's proposal of two hours per week (for 22 weeks) for APSC's management during rebanding is appropriate.[106] The TA Mediator discounts APSC's proposed 336.5 hours for project management. He finds that the 336.5 hours were premised on the substantially higher level of effort for APSC internal personnel that had originally been contemplated. However, with Federal assuming a management role, the TA Mediator believes that most of APSC's management role will be focused on interfacing with Federal.[107]

43. *Federal Costs.* APSC proposes $147,000 for nearly 800 hours of Federal's time and $6,800 in travel expenses for Federal to perform the following functions:[108]

- Develop and track the overall schedule to reconfigure the radio system
- Monitor and track reconfiguration activities with appropriate user groups and agencies
- Provide technical assistance with radio template development to include the initial addition of replacement channels and the subsequent removal of original channels once the infrastructure has been updated and reconfigured;
- Develop radio system user orientation materials and conduct briefings to explain the use of modified talk group channel plans
- Oversee and audit Harris performance acceptance tests on behalf of Licensee
- Monitor and coordinate progress of reconfiguration activities, including with outside agencies to facilitate proper completion of all activities during the process.

44. Sprint argues that APSC has not shown that Federal's tasks will not duplicate efforts already covered by time allotted to APSC and therefore proposes no payment to Federal.[109]

45. The TA Mediator recommends the Commission allow APSC to use Federal to manage its subscriber reconfiguration effort, with support from APSC's internal resources. APSC estimates Federal will require 24 hours for initial preparation of the rebanding effort, four hours per week during reconfiguration, two hours for status meetings every four weeks, and 40 hours for final closeout of the reconfiguration effort.[110] The TA Mediator recommends that the Commission conclude that time should be allotted to Federal during the rebanding process to assure that the Licensee's personnel make radios available, to track which of the radios are in fact rebanded and which remain to be reconfigured, and to deal with problems as they arise. The TA Mediator concludes, however, that APSC has justified only $73,362.00 (one- half of Federal's proposed levels of effort (including travel)).[111]

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[105] *Id.*

[106] *Id.*

[107] *Id.*

[108] RR at 21 (citing APSC PRM at 31, Sprint PRM, App. 1).

[109] RR at 21 (citing Sprint PRM 23-24).

[110] RR at 21.

[111] *Id.*

46. *Infrastructure Reconfiguration.* APSC initially proposed $137,426 for infrastructure reconfiguration, with a level of effort involving two Harris technicians, a Federal supervisor and an APSC employee escort.[112] However, after several iterations in efforts to streamline and reduce duplicative efforts, APSC reduced the amount it seeks for this task to $58,893.[113]

47. Sprint, however, proposes $47,941 for infrastructure reconfiguration work. Sprint reduced the $58,893 proposed by the Licensee by estimating the hours that it believes Motorola would require to perform this work based on Sprint's past experience. Sprint reduced the Harris quote primarily by basing its estimate on an 8-hour work day, instead of the 10-hour work day that was the basis of the Harris estimate.[114] However, when Sprint made these adjustments, it was unaware that APSC had reduced its initial estimate from $137,426 to $58,893.[115]

48. The TA Mediator recommends that the Commission find that APSC's $58,893 proposal modified during the mediation process, and as contained in APSC's Reply PRM, is reasonable and satisfies the Minimum Necessary Cost Standard. The TA Mediator notes that APSC's proposed revisions come very close to the amount proposed by Sprint. [116] APSC's additional proposed revisions include some items such as travel costs which are uncertain and cannot always be reliably estimated. Since these will be billed at actual time and expense, the TA Mediator sees no reason for a further reduction of Harris's expenses.[117]

49. *Engineering and Testing.* APSC initially proposed $115,972 for Method 2 before-and-after coverage testing at the eight infrastructure sites to be rebanded and to compile and review the results of that testing. Sprint proposed reducing this amount to $10,153, arguing that Method 2 testing is not called for in this case since no antennas are being changed.[118] Following the submission of Sprint's PRM, APSC conceded that Method 1 testing is appropriate and reduced its proposed cost by $88,727, the same adjustment Sprint proposed to the Harris time. However, APSC did not propose to reduce the amount requested for the Licensee's internal costs, and for Federal. APSC claims that Federal's services are needed for review of the testing documentation, and compilation and analysis of the data, so that APSC's internal staff can confirm that coverage comparability has been achieved.[119]

50. Sprint has proposed 24.8 hours for Licensee time, and none for Federal. Sprint argues that, given the change to Method 1 testing, Federal's services are unnecessary and that 24.8 hours of internal staff time is sufficient for staff to analyze the measurement data and conclude whether comparable coverage has been achieved.[120]

51. The TA Mediator recommends substantially reducing the proposed level of testing effort because Method 1 testing is significantly less complicated than Method 2 testing, and it will produce less

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[112] *Id.* at 22.

[113] *Id.*

[114] *Id.* at 22-23.

[115] *Id.*

[116] *Id.* at 23.

[117] *Id.*

[118] *Id.* at 24.

[119] *Id.*

[120] *Id.* at 24.

data for Federal to compile and for APSC to review.[121] The TA Mediator recommends that the Commission allocate 20.8 hours to Federal for the work described above ($3,640 at $175 per hour), and four hours to the Licensee ($320 at $80 per hour), for a total of $3,960.[122]

52. *Other Services.* The parties dispute 16 hours of costs ($2,800) when Federal negotiated its contract with APSC, and the work of Federal's Project Manager when he (a) finalized the SOW and the standalone consulting agreements with APSC, (b) reviewed the final Harris SOW and consulting agreement, and (c) reviewed the final FRA documents.[123] Sprint rejects the request, arguing that Sprint has not reimbursed vendors or contractors in the past for negotiating licensee-vendor contracts and that the claimed costs are transactional costs normally absorbed by the vendor.[124]

53. The TA Mediator agrees with Sprint that Sprint should not be required to pay for expenses in connection with the negotiation of Licensee-vendor contracts. Moreover, the mediator also concludes that Federal's other work, *supra,* duplicates that undertaken by APSC's counsel. The TA Mediator therefore recommends that the Commission find that Federal's costs do not satisfy the Minimum Reasonable Cost Standard.[125]

54. *Combiner Issues.* Sprint has offered to replace three of the four combiners that APSC wanted replaced.[126] APSC accepts the Sprint combiners so long as their insertion loss is not 1.5 dB or greater.[127] The TA Mediator recommends that the Commission accept Sprint's proposal with the condition that if APSC can demonstrate that a combiner has an insertion loss 1.5 dB or greater and—as a result of that insertion loss—APSC does not receive comparable facilities, APSC may seek redress through a change notice.[128]

55. *Pre-selector Issues.* APSC proposed replacing the pre-selector at the Mount Lemmon site, because the pre-selector will not pass 809.9125 MHz, a frequency authorized for this site.[129] Sprint opposes replacement of the pre-selector, arguing that Harris's own data show that the existing pre-selector will pass the rebanded frequencies, that frequency 809.9125 MHz is not being changed as part of rebanding and that, in any event, APSC cannot currently use frequency 809.9125 MHz.[130]

56. APSC does not dispute Sprint's comments regarding frequency 809.9125 MHz but it argues that it would leave APSC open to future commercial mobile interference and with a pre-selector different than any of its others if the pre-selector is not replaced.[131]

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[121] *Id.*

[122] *Id.* at 25.

[123] *Id.* (citing Sprint PRM at 27, 42).

[124] *Id.*

[125] RR at 25.

[126] *Id.*

[127] *Id.*

[128] *Id.*

[129] *Id. (*citing APSC PRM, Ex. 1).

[130] RR at 25 (citing Sprint PRM at 28-29).

[131] RR at 25 (citing APSC Reply PRM at 18).

57. The TA Mediator recommends that the Commission find that a replacement for the Mount Lemmon pre-selector is not needed, since APSC cannot use 809.9125 MHz and the existing pre-selector will pass the rebanded frequencies.[132]

58. *Loaner Equipment.* APSC requests various loaner cables and loaner computers running DOS to be used in reprogramming APSC's radios. It also asks for a supply of spare replacement radios in the event that any of the existing radios "brick" (become unusable) during rebanding.[133] APSC notes that Sprint has made this type of equipment available in other rebandings, and that having fresh cables, and known good equipment at the start of rebanding allows technicians to complete work and meet daily requirements.[134]

59. Sprint offers reduced quantities of each of the items requested and the TA Mediator recommends that the Commission accept Sprint's proposal.[135] The TA Mediator finds that APSC has not shown that it needs more equipment than Sprint has offered.[136]

4. APCS Allegations of Sprint's Failure to Negotiate in Good Faith

60. The Commission's Rules state that "[a]ll Parties are charged with the obligation of utmost 'good faith' in the negotiation process."[137] APSC argues that Sprint has failed to comply with its good faith obligation in negotiations and mediation, contending that Sprint failed to participate during the initial negotiation and mediation periods. APSC also faults Sprint for failure to reply to correspondence from APSC, and that Sprint's counteroffer failed to reflect knowledge of the Licensee's system.[138]

61. Sprint asserts that it has negotiated in good faith. Sprint notes that it raised questions and prepared a counteroffer during the mediation period, but that it was delayed in preparing that counteroffer due to the unique circumstance of APSC proposing that Harris reband a Motorola system.[139] Sprint also argues that APSC should not be reimbursed for the cost of preparing its PRMs.[140]

62. The TA Mediator recommends that the Commission find that Sprint has not breached its good faith obligation.[141] The TA Mediator notes that Sprint participated in mediation, *i.e.,* that Sprint sought information from APSC, and APSC responded to Sprint's requests.[142]

63. The TA Mediator further notes that, although Sprint submitted its Project Review Worksheet (PRW) and counteroffer only six days prior to the end of the initial mediation period, the Commission extended the mediation period by 20 working days thereby alleviating any prejudice to APSC caused by

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[132] RR at 25.

[133] RR at 25 (citing APSC Reply PRM at 8).

[134] RR at 25 (citing APSC Reply PRM at 18).

[135] RR at 27.

[136] *Id*.

[137] *See* 47 C.F.R. § 90.677(c).

[138] ASPC PRM at 59.

[139] Sprint PRM at 44.

[140] *Id.*

[141] RR at 28.

[142] *Id.* at 28-29.

Sprint's late-submitted counteroffer.[143] The TA Mediator also finds that Sprint's PRW is consistent with Commission orders stating that the presence of a less costly alternative is a basis for concluding that the Minimum Necessary Cost Standard has not been met by a particular licensee proposal.[144]

64. Finally, the TA Mediator recommends that the Commission find APSC is entitled to reimbursement of its reasonable costs in preparing its documents in the mediation, including those of a consulting engineer.[145] The TA Mediator notes that the Commission has said that when arguments advanced in PRMs are patently frivolous, payment for preparation of those documents may be denied or reduced.[146] The TA Mediator, however, does not regard APSC's arguments as frivolous.[147]

C. COST METRICS REPORT

65. At the Bureau's request, the TA produced Cost Metrics Reports of APSC's and Sprint's cost estimate to assist in the TA Mediator's analysis of this matter.[148] The Bureau also afforded the parties the opportunity to comment on these reports.[149]

66. The TA Metrics are a set of aggregated data on retuning costs for 800 MHz systems approved by the TA.[150] The Bureau has stated that, although the cost ranges presented in the TA Metrics give rise to a presumption of reasonableness, they are not binding or dispositive of individual cases. In particular, any party to negotiation or mediation may demonstrate that there are aspects of a reconfiguration that differentiate it from the reconfigurations on which the TA Metrics are based, therefore justifying higher or lower rebanding costs. Because rebanding licensees bear the burden of demonstrating that their proposed costs meet the Minimum Reasonable Cost Standard, a licensee whose costs are significantly higher than the costs incurred by licensees with similarly sized reconfigurations must conclusively demonstrate by record evidence that its reconfiguration is, in fact, materially different from the reconfigurations on which the TA Metrics are based. Costs that deviate greatly from the TA Metrics will be given close scrutiny by the TA Mediators and by the Bureau in cases that are submitted for *de novo* review.[151]

67. The instant Cost Metric Reports compare APSC's cost estimate with FRAs of public safety licensees with between 2000 and 4000 subscriber units and between 11-55 repeaters. The two reports highlight the gulf between the two parties' positions. The Creative Quote of $787, 295.80 falls in the

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[143] *Id.* at 29.

[144] *Id.*

[145] *Id.*

[146] *Id. (*citing City of Virginia Beach, Virginia and Sprint Nextel, *Memorandum Opinion and Order,* 25 FCC Rcd 10898, 10913-14, ¶ 50. (*Virginia Beach MO&O*)).

[147] *Id.*

[148] Cost Metrics Comparison Report for Licensee Offer (October 28, 2014).

[149] *See* Supplemental Statement of Position of Sprint Corporation, filed Nov. 10, 2014 (Sprint Supplemental SOP) and Comments on Transition Administrator Metrics of Arizona Public Service Company, filed Nov. 10, 2014 (APSC Supplemental SOP).

[150] *See* Public Safety and Homeland Security Bureau Announces Enhancements to the Metric Data Used in 800 MHz Rebanding Negotiations and Mediations, *Public Notice,* 25 FCC Rcd 8151 (PSHSB 2010).

[151] *Id.*

25th percentile of all FRA's within the category, while APSC's cost estimate of $2,628,721.96 is at the 98th percentile.[152]

68. Sprint contends that the Cost Metric Reports demonstrate that APSC's cost estimate is highly inflated and fails to meet the Minimum Necessary Cost Standard.[153] Sprint notes that APSC's cost estimate exceeds the 75th percentile for nine of eleven cost categories despite the fact that the APSC system only has 3189 units which puts it in the middle of the Cost Metric category of 2000-4000 units and the fact that APSC does not use atypical technology.[154]

69. APSC argues that the Cost Metrics Report merely shows only that the Creative Quote is demonstrably inadequate.[155] APSC notes that there are 105 rebandings within the 2000-4000 unit category and claims that without examining each individual rebanding it is impossible to evaluate whether APSC's cost estimate is comparable because of the huge variation of rebandings within the data set.[156] APSC contends that it is logical that APSC should be in the upper end of the metrics, because it is one of the few statewide systems in the category that has increased travel and travel-related costs, including seasonal fluctuation in travel expenses.[157] In addition APSC notes that the metrics reflect an aggregation of over a decade of data and values should be adjusted upward because of cost increases during this period.[158]

III. DISCUSSION

A. APSC Has Failed to Meet Its Burden of Proof

70. Based upon the record before us, we find that APSC has failed to demonstrate that its cost estimate meets the Minimum Necessary Cost Standard. As an initial matter, we note that APSC is free to use Harris or whichever other vendor it wishes and can use any rebanding methodology it desires. However, the Minimum Necessary Cost Standard still applies. To the extent that APSC's chosen vendor cannot reband APSC's system at the Minimum Necessary Cost, APSC may still employ that vendor. The cost overage, however, is APSC's responsibility, not Sprint's. Thus, we do not question APSC's desire to utilize certain vendors or to employ specific personnel who have previous knowledge of its system; we only rule on whether a lower cost alternative is clearly available that would provide APSC with comparable facilities.[159]

71. We agree with APSC that the Creative Quote may not be complete and were hastily prepared in contrast to the five months of planning that went into the Harris quote.[160] Even accounting for the shortcomings, in the Creative Quote, it is so much less than the sum sought by APSC, *i.e.,* one-third as much, that it suggests that APSC has not met, indeed, even approached, the Minimum Necessary Cost

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[152] As Sprint notes in its Supplemental SOP that the Cost Metric Report reflects the competitive price quote Creative Communications made in response to a request by Sprint.

[153] Sprint Supplemental SOP at 2.

[154] *Id.* at 2-3.

[155] APSC Supplemental SOP at 2.

[156] *Id.*

[157] *Id.* at 3-4.

[158] *Id.* at 3.

[159] *See Indiana MO&O*.

[160] APSC SOP at 4.

Standard. Our opinion in that regard is bolstered by the fact that APSC has not shown that its radios are unique or that its infrastructure is particularly challenging to reband. Licensees are not required to seek competitive bids for rebanding services. However, at a minimum, we would expect that a licensee proposing to have a Motorola system rebanded by a Motorola competitor, would at least investigate the availability of services from Motorola – the system's vendor. Here, however, APSC merely speculated that Motorola and its service shops might be too busy to accommodate APSC's needs, and it ignored ascertaining the availability—and cost—of their services.[161] We conclude, therefore, that the Creative Quote is entitled to some deference in our analysis.

72. Our conclusion that APSC has not met its evidentiary burden of establishing that its proposal meets the Minimum Necessary Cost Standard is confirmed by the Cost Metrics Reports. We disagree with APSC's contention that these reports have limited value.[162] They have factored into many of our prior decisions[163] and have become more relevant with time as additional rebandings have been added to the collected data. As Sprint points out, a licensee's burden to show compliance with the Commission's Minimum Necessary Cost Standard, increases the more the licensee's costs fall above the median costs in the TA Metrics.[164] Because APSC's equipment reconfiguration costs fall in the 98th percentile, its burden is particularly heavy.

73. Our decision regarding the TA Metrics deviates from the TA Mediator's Recommended Resolution in which he discounts the applicability of the TA Metrics to APSC's system because the TA Metrics were derived only from the rebanding costs of public safety 800 MHz systems, resulting in what the TA Mediator describes as an "apple and oranges" comparison.[165] The TA Mediator, however, fails to explain what decisionally significant differences exist between public safety and non-public safety systems. The non-public safety subscriber equipment is equivalent and the infrastructure indistinguishable from that used by public safety 800 MHz licensees. Although, APSC has described its system as "a public safety system on steroids"[166] it has not explained how the APSC system with equivalent radios and indistinguishable infrastructure differs at all from a comparable public safety system. We also note that APSC chose to compare its system to that of a public safety licensee when arguing that its proposed methodology had been employed in other 800 MHz rebandings.[167]

74. We are unpersuaded by APSC extracting the State of Alabama from the TA Metrics and then claiming that travel and lodging are allegedly more expensive in Arizona than in Alabama. Nor are we persuaded by APSC's claim that the TA Metrics makes no adjustments for inflation.[168] Even accepting APSC's claims, we cannot reconcile them with a three-to-one difference between APSC's proposed costs and those submitted by Creative, or with the fact that APSC's proposal falls in the 98th percentile for a system whose only distinction is that it is more geographically dispersed than some—but not all—systems considered in the TA Metrics. Again, we can concede APSC's geographical dispersion

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[161] APSC PRM at 5.

[162] APSC Supplemental SOP at 2.

[163] *See, e.g.*, *Virginia Beach MO&O* and *MSU MO&O.*

[164] Sprint Supplementary SOP at 4 (citing County of Charles, Maryland, *Memorandum Opinion and Order,* 27 FCC Rcd 11476.(2012)).

[165] RR at 12-14, n.77.

[166] APSC PRM at 58 n.36.

[167] RR at 9 (citing Reply Proposed Resolution Memorandum of Licensee (Aug. 26, 2014) at 5).

[168] APSC Supplemental SOP at 3; Comments on Transition Administrator Metrics of APSC at 2, 5 (Nov. 10, 2014).

claim and still not conclude that it accounts for the fact that Creative's quote is one third of APSC's claimed costs. Further, we can concede that the Creative quote omitted some of services claimed by APSC without concluding that such omission accounts for a three-to-one difference between the APSC and Creative costs. In sum, our legal analysis rests on the fact that it is APSC—not Sprint—that has the burden of proof to show compliance with the Minimum Necessary Cost Standard. The TA Metrics and the Creative Quote convince us that—although there may be limitations to both,—they act in combination to lead us to conclude that APSC has not met the Minimum Necessary Cost Standard; , therefore, we cannot, consistent with precedent,[169] sanction APSC's claimed costs.

75. APSC has not carried its burden to show that its cost estimate meets the Minimum Necessary Cost Standard. Accordingly, we concur with the TA Mediator and find that Sprint's counter-offer of $802,617— as adjusted below—is a reasonable cost to reconfigure APSC's system.

B. Specific SOW Issues

76. *Code Plugs.* We concur with the TA Mediator and find that APSC has not met its burden of proof to allocate funds sufficient to fund code plug rebuilds for one quarter of the embedded subscriber base. Its subsequent position that, because the number of radios that will require rebuilds "is not zero;" it is more cost-effective to allocate the funds up front, rather than using the change notice process does not overcome this deficiency.[170] While we may agree that the number of radios needing code plug rebuilds is probably not zero, APSC has offered no specific evidence to support its speculative estimate that almost 800 radios will require such work. Accordingly, when and if field experience demonstrates that a specific number of radios require code plug revisions, APSC can use the change notice process to obtain funds for rebuilding that specific number of code plugs.

77. *MIA Radios*. First, we observe that MIA radios – radios that are not made available for retuning on schedule – are largely within the control of the licensee whose personnel are responsible for providing the radios to the retuning technicians. Secondly, we concur with the TA Mediator that Sprint has already factored a certain level of missing in action radios into its cost estimate. If, through no fault of the licensee, additional radios are missing in action, APSC may resort to the change notice process to account for any additional costs incurred.

78. *Motor Homes*. We find that APSC has not justified the rental of two recreational vehicles as mobile work places. In rebanding, at least a modicum of cooperation is required of the licensee and radios conventionally are retuned at the licensee's premises. We find that cooperation lacking here. Thus, APSC contends that it has identified fifty retuning sites state-wide, but cannot "guarantee" that retuning space will be available at these locations,[171] and, therefore, that the motor homes are required. We are not persuaded by this claim, because it is not supported by any indication of effort on APSC's part to determine whether retuning space is available at APSC's facilities. Therefore, we disallow APSC's claim for motor homes as it does not represent the Minimum Necessary Cost of retuning APSC's radios.

79. *Harris Staffing*. We find that the Sprint's allocation of $107,450 for the functions of the Quality Assurance Manager is sufficient. We accept the Sprint allocation because the $371,707.68 requested by APSC for a Quality Assurance Manager includes services also proposed to be performed by others, including the System Engineer. Although Sprint contends that the services of a Harris System Engineer are unnecessary, we disagree, *inter alia* because we have approved use of a Harris System

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[169] *See Cost Clarification Order.*

[170] APSC SOP at 7.

[171] APSC SOP at 8-9.

Engineer in a similar case which we have reviewed,[172] and because the amount requested by APSC—$26,346—is reasonable for the services to be provided. We therefore agree with the TA Mediator and approve the amount requested by APSC for the System Engineer.

80. *Computer Services.* We find APSC has adequately justified its request to isolate the programming computers from external connections and to use programming software supplied by APSC. We therefore approve the services of an IT technician to load the programming software and oversee its use. We decline, however, to approve database development work to record programming progress. The programming technicians can memorialize their efforts on spreadsheets. We find reasonable APSC's request for $7,970 ($2.50 per subscriber radio)[173] to originate and maintain such spreadsheets.

81. *Licensee Internal Costs.* We disagree with APSC that its proposal of $284,000 (one half hour per radio per touch) for services by APSC employees in connection with subscriber reconfiguration is either necessary or conforms to the Minimum Necessary Cost Standard.[174] As Sprint notes, APSC's proposal for its internal staff's involvement in the subscriber reconfiguration process would equate to more than 50% of the time taken to retune a radio.[175] We perceive a contradiction between APSC's proposal and its claim that "APS does not have sufficient internal resources with the skill set necessary to manage and audit a project of this magnitude and duration while continuing to support daily operational needs."[176] Thus, it is difficult to understand how, given this staff shortage, APSC could assign its staff to 3,030 hours of effort in support of reconfiguration of subscriber units. Similarly, because we do not approve the 3,030 hours of staff effort, we cannot logically approve APSC's requested 336.5 hours of internal project management time associated with managing the participation of its employees in the rebanding effort.

82. We agree with Sprint that the services to be provided by APSC's internal staff in connection with subscriber unit rebanding should not be calculated on a "per-radio" basis.[177] We also agree with Sprint that one hour per day of internal staff time should suffice for the limited tasks that internal staff is charged with. But we agree with the TA Mediator as well, that one-hour per day is inadequate when it is considered that there will be "two separate programming teams working simultaneously at two different locations" thus justifying doubling Sprint's estimate, *i.e.,* to two hours per day (304 hours total) at a cost of $28,500.[178] Given the reduction of the amount allocated for internal staff time in connection with reconfiguration of subscriber units, APSC's request for 336.5 hours of management oversight is excessive. Accordingly we agree with the TA Mediator that $8,536 for such management oversight (two hours/week for 22 weeks, for overseeing two rebanding teams) comes within the Minimum Necessary Cost Standard.

83. *Federal Costs.* We agree with the mediator that, while APSC has demonstrated a need for outside engineering consultants, it has failed to justify the need for the level of project management that it seeks from Federal.[179] We note that, in addition to Federal Engineering project management efforts,

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[172] *See MSU MO&O)* at 11230, 11233, ¶¶ 66,75.

[173] APSC SOP at 10.

[174] *Id.* at 12.

[175] Sprint PRM at 19.

[176] APSC PRM at 3 (APSC's justification for the use of Federal Engineering).

[177] Sprint PRM at 19.

[178] RR at 20.

[179] *Id.* at 21-22.

APSC seeks project management hours for both its internal employees and Harris employees. We find this level of effort duplicative and therefore agree with the TA Mediator that APSC has only justified half of the costs it seeks from Federal.

84. *Infrastructure Reconfiguration.* We agree with the TA Mediator and find that APSC's restructured request for $58,893 is reasonable.

85. *Engineering and Testing.* We agree with the TA Mediator and allocate 20.8 hours for Federal and 4 hours to the licensee to perform and evaluate Level 1 testing. However, we agree with APSC that it can seek additional hours through the change notice process should the need arise.[180]

86. *Legal Services.* We find that Sprint is not responsible for the negotiation of licensee vendor contracts.

87. *Combiner Issues.* Sprint's offer to replace three of the four combiners is reasonable, provided that if APSC can demonstrate an insertion loss of greater than 1.5 dB, which loss results in APSC not receiving comparable facilities, APSC can seek redress via change notice.

88. *Pre-selector Issues.* Since APSC cannot use frequency 809.9125 MHz there is no need for it to replace the pre-selector at the Mount Lemmon site.

89. *Loaner Equipment.* Sprint's offer of reduced levels of loaner equipment is adequate, however, APSC can address a need for more equipment via the change notice process should the need arise.

C. Good Faith

90. We find that while Sprint's level of participation in the initial mediation and negotiation periods may not have been ideal it does not rise to the level of bad faith. We also find that APSC is entitled to be reimbursed for the cost of preparing its PRMs, including any applicable consulting engineering fees.

IV. CONCLUSION

91. In sum, we affirm the TA Mediator's Recommended Resolution entered September 8, 2014, to the extent that it finds that APSC has not met its burden of demonstrating that its proposed costs estimate meets the Commission's Minimum Necessary Cost Standard.

92. Based on the record before us, we find the following costs are reasonable and approve them:

- $802,617 for subscriber reconfiguration
- $107,450 for a Quality Assurance Manager
- $26,364 for a System Engineer
- $4,200 for computer set-up costs
- $7,970 for recording radio rebanding data on spreadsheets
- $37,036 for APSC internal staff and staff management
- $73,362 for Federal Engineering Costs
- $58,893 for Infrastructure Reconfiguration Costs
- $3964 for testing (Federal and APSC internal costs)
- $65,720 for outside legal counsel.
- $5,632 for in-house legal counsel

[180] *Id.* at 14.

The listed services total $1,193,208. The approved amount is $1,435,514 less than APSC's requested $2,628,722, but $405,913 more than the Creative Quote. [181]

93. We find the following proposed cost categories are not reasonable within the meaning of the Commission's Minimum Necessary Cost standard, for the reasons expressed *supra*:

- Lease of Motor Homes
- Vendor's legal costs associated with the negotiation of licensee-vendor contracts
- Replacement of pre-selector at the Mount Lemmon site

94. If necessary, APSC can address additional costs for the following via Change Notice:

- Code Plug Rebuilds
- Missing in Action Radios
- Replacement combiners for combiners with loss greater than 1.5 dB, which loss prevents APSC from receiving comparable facilities.
- Additional hours for testing should initial tests disclose that APSC's post-rebanding coverage is not comparable to pre-rebanding coverage.

V. ORDERING CLAUSES

95. Accordingly, pursuant to the authority of Sections 0.131 and 0.331 of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331; Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 90.677, of the Commission's Rules, 47 C.F.R. § 90.677, IT IS ORDERED that the dispute submitted by the Transition Administrator is resolved as discussed above.

96. IT IS FURTHER ORDERED, that representatives of Sprint Corporation and Arizona Public Service Company, each with the authority to bind its principal, SHALL MEET under the auspices of the Transition Administrator TA Mediator, within ten business days of the release date of this *Memorandum Opinion and Order* to conclude a Frequency Reconfiguration Agreement consistent herewith and that such meeting shall continue from business day to business day until the parties reach agreement in principle.

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

FEDERAL COMMUNICATIONS COMMISSION

Michael J. Wilhelm
Deputy Chief
Policy and Licensing Division
Public Safety and Homeland Security Bureau

[181] TA Metrics Report, DL8910418957, Arizona Public Service Company, TAM 45010 (Oct. 28, 2014).