

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

In the Matter of)
)
Request by Itron, Inc. for) WT Docket No. 13-195
Waivers of the Commission's Rules)

REPLY OF ITRON, INC.

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September 24, 2013

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REPLY OF ITRON, INC.

On September 9, 2013, USA Mobility, Inc. ("USA Mobility") filed Comments¹ asking that the Commission deny the above-captioned request (the "Request" or "Request for Waiver") filed by Itron, Inc.² ("Itron"). Itron, by its attorneys, hereby replies to USA Mobility.

I. SUMMARY AND INTRODUCTION

In its Request, Itron sought waivers of various rules pertaining to its operations on Upper Band paging frequencies. Among other things, Itron asked that these rules be waived, to the extent necessary, so that it could operate on a half-duplex basis. Itron also requested a waiver that would permit its fixed and mobile stations that operate with an effective radiated power ("ERP") of less than 2 watts to be subject to a frequency tolerance of 5 ppm rather than 1.5 ppm. Grant of these waiver requests will

¹ Comments of USA Mobility, Inc., WT Docket No. 13-195 (submitted Sep. 9, 2013) ("USA Mobility Comments").

² Request for Waiver of Itron, Inc., WT Docket No. 13-195 (submitted Dec. 17, 2012) ("Request" or "Request for Waiver").

enable Itron to support automatic meter reading and advanced metering infrastructure (“AMI”) systems; AMI is a key component of modern smart grid systems.

Itron holds Upper Band paging licenses in 155 markets. USA Mobility is the only licensee in those markets to oppose Itron’s Request.

USA Mobility claims that the flexibility sought by Itron can be conveyed only in a rulemaking proceeding, and not via waiver. USA Mobility also claims there is a risk of interference to its paging systems. Itron demonstrates in this Reply that USA Mobility’s objections are procedurally and substantively deficient.

Procedural flaws. There are two procedural flaws associated with USA Mobility’s filing. First, although USA Mobility’s outside counsel makes multiple technical arguments, USA Mobility has provided no engineering statement in support of the technical arguments. Second, USA Mobility has not satisfied the requirement for an affidavit or declaration from a person with personal knowledge of the facts asserted.

Deficiencies in USA Mobility’s Non-Technical Arguments. USA Mobility’s claim that a rulemaking is needed is wrong on multiple counts.

- The Commission’s rules do not even require one-way communications on Itron’s frequencies, and Itron only requested a waiver to provide half-duplex service out of an abundance of caution.
 - The rules governing Itron’s frequencies make no mention of one-way service.
 - The rules used to require one-way service, but the requirement was eliminated in 1997.
 - When the Commission intends to specify that a service must be one-way, it says so explicitly.

- USA Mobility's suggestion that the Commission intends for there to be a rigid "foundation" that would confine 931 MHz licensees to particular technologies or modes of operation is out of step with the Commission's pronouncements in the context of the 931 MHz auction.
- Even if there were a one-way requirement, Itron's half-duplex operations will be one-way. At any given time, each of Itron's transmission paths will be inactive or will be used to send messages in only a single direction.
- Even if a waiver were needed, there would be good cause to grant one.
 - Half-duplex operations would serve the underlying interference objectives of any one-way requirement because:
 - (i) Itron will comply with the emission mask specified in the rules; and
 - (ii) limitations on Itron's effective radiated power and duty cycle ensure that Itron's system will have less interference potential than a one-way system operating with maximum facilities.
 - A waiver of any one-way requirement would serve the public interest by making possible a more efficient use of spectrum in furtherance of the national priority of increasing the reliability of this nation's electric grid.
 - The cases cited by USA Mobility are inapposite.

Deficiencies in USA Mobility's Technical Arguments. Although USA Mobility takes issue with Itron's interference showing, USA Mobility's technical arguments do not withstand scrutiny, as is evidenced by the following points that are made in a technical statement provided by Itron's Senior Principal Systems Engineer:

- USA Mobility claims that its systems will be especially sensitive to Itron's operations, but that assertion has no basis in engineering fact.
- USA Mobility suggests that Itron's access methodology could lack contention mitigating techniques, but any qualified telecommunications engineer familiar with RF system design would understand that contention methods must be employed in a system such as Itron's to balance traffic loads.

- USA Mobility's arguments concerning whether Itron's system will employ repeaters are irrelevant, because Itron's system will have less interference potential than the fully loaded conventional paging systems.
- Itron has designed its system to tolerate transmissions from other users and has no intention, notwithstanding USA Mobility's speculation to the contrary, of requesting that USA Mobility or other incumbents alter their operating parameters.
- USA Mobility questions whether Itron can be relied on to comply with the emissions mask specified in its Request, but Itron is no different in this respect from numerous FCC licensees that must comply with emissions masks and other technical requirements.

II. USA MOBILITY'S FILING IS PROCEDURALLY DEFICIENT.

USA Mobility's technical arguments consist solely of statements made by the company's outside counsel. USA Mobility offers no engineering statement or other analysis from a qualified technical representative. Its arguments, moreover, consist of vague and speculative interference claims that have no basis in fact. For these reasons alone, USA Mobility's technical arguments should be rejected.

USA Mobility's filing is procedurally deficient for another reason. Although the filing is styled as "comments," it in form is a petition to deny, *i.e.*, USA Mobility asks that Itron's Request be denied.³ The Commission's rules require that a petition to deny be supported by specific allegations of fact and that, with exception of matters as to which the Commission may take official notice, such allegations be supported by affidavit of a person with personal knowledge of the facts being asserted.⁴ None of USA Mobility's allegations of fact is supported by an affidavit or declaration.

³ See USA Mobility Comments at 11.

⁴ 47 C.F.R. § 1.939(d).

III. ITRON EITHER ALREADY HAS THE AUTHORITY TO PROVIDE HALF-DUPLEX SERVICE OR SHOULD BE GRANTED A WAIVER TO PROVIDE HALF-DUPLEX SERVICE.

USA Mobility argues that Itron's proposal to provide half-duplex service would undermine what it asserts, without citation, to be "the foundation for the Commission policy of maintaining certain frequencies exclusively for one-way paging services."⁵

This contention is erroneous in multiple respects:

(1) The Commission's rules do not require one-way communications on Itron's frequencies;⁶

(2) Itron's half-duplex transmissions are one-way, not two-way;⁷ and

(3) Even if two-way transmissions were prohibited and Itron's transmissions were deemed to be two-way, a waiver is warranted because Itron's system has less interference potential than a conventional one-way paging system.

A. The Commission's Rules Do Not Require One-Way Communications on Itron's Frequencies.

Any interpretation of the Commission's rules of course must start with the words of the rules themselves. Here, neither the rule in question (nor any other) states that the frequencies at issue must be used solely for one-way transmissions. In fact, Section

⁵ Comments of USA Mobility at 9.

⁶ USA Mobility has not objected to Itron's use of its frequencies to provide non-paging data services. In fact, it is Itron's understanding that USA Mobility provides capacity on its paging network to a competitor of Itron's that uses the capacity not for paging services but for advanced meter reading services. See <http://www.prnewswire.com/news-releases/usa-mobility-amds-and-sensus-form-alliance-to-provide-meter-monitoring-services-over-two-way-npcs-network-54611957.html>. In any event, it was demonstrated in the Request that, to the extent a waiver is needed to provide non-paging data services on Itron's channels, there is good cause for granting a waiver.

⁷ See Request for Waiver at 5.

22.531 of the Commission's rules used to state that these frequencies were to be used for one-way paging, but that provision was removed in 1997 as part of a broad rewrite of the Commission's rules to facilitate auction of paging channels.⁸ These changes were designed to extend to "931 MHz licensees ... the same flexibility as narrowband PCS licensees,"⁹ and narrowband PCS licensees are routinely authorized to provide two-way paging service.¹⁰

The Commission's Table of Allocations does not limit service on 931 MHz channels to one-way transmissions, either. The Table at one time required that 931 MHz channels be used for "One-Way Paging,"¹¹ but that requirement, like the former requirement in Section 22.531 for one-way paging, has been eliminated.¹²

When the Commission intends to specify that a service must be one-way, it knows how to state it. Immediately below the part of Section 22.531 that addresses use of frequencies in the 931 MHz band for paging on a licensed basis, the rule provides in subsection (c) that carriers also may provide paging service using channels leased from broadcast licensees, and subsection (c) expressly limits the type of service that can be provided via such leased channels to "one-way paging."¹³ Similarly, US Note 73(b) to the Table of Allocations states that "use of the frequencies 152.0075 and 150.79 is

⁸ *In the Matter of Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act -- Competitive Bidding*, Second Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd. 2732, appendix A, Section 16 (1997).

⁹ *Id.* at 2755, ¶15.

¹⁰ See <http://www.fcc.gov/encyclopedia/narrowband-personal-communications-service-pcs>.

¹¹ 47 C.F.R. § 2.106 at 285 (revised Oct. 1, 1983).

¹² 47 C.F.R. § 2.106 at 501 (revised Oct. 1, 2012).

¹³ 47 C.F.R. § 22.531(c).

restricted to base stations that are authorized **only for one-way communications** to mobile receivers.”¹⁴

Moreover, USA Mobility’s suggestion that the Commission intends for there to be a rigid “foundation” that would confine 931 MHz licensees to particular technologies or modes of operation is out of step with the Commission’s pronouncements in the context of the 931 MHz auction. The Commission’s Fact Sheet for Auction 87 stated:

During the past 15 years, the Commission has expanded the permissible operations for Part 22 paging licenses. In 1996, CMRS licensees, including paging licensees, were given maximum flexibility to offer all types of fixed, mobile, and hybrid services. In 2005, the Commission further revised the Part 22 rules by eliminating (1) the requirement that paging stations be “domestic common carriers,” (2) the restriction limiting eligibility to “communications common carriers,” and (3) various other technical and licensing restrictions. [] These changes expanded the potential uses for paging licenses and increased the flexibility of Part 22 licensees to respond to the marketplace and meet the needs of consumers.¹⁵

In sum: (i) the Commission’s rules for the 931 MHz band do not require one-way service; (ii) in fact, the rules were revised years ago to eliminate what had been a one-way service requirement; (iii) the purpose of the rule revisions was to give 931 MHz licensees the flexibility possessed by narrowband PCS licensees, who routinely are authorized to provide two-way service; and (iv) the Commission explicitly stated in the context of the 931 MHz auction that licensees should have maximum flexibility. For all of these reasons, Itron should not require a waiver to provide two-way service on its

¹⁴ 47 C.F.R. §2.106, US Note 73(b)(emphasis added).

¹⁵ Auction 87 Fact Sheet, available at http://wireless.fcc.gov/auctions/default.htm?job=auction_factsheet&id=87.

931 MHz channels, and USA Mobility's arguments relating to two-way service should be rejected.

B. Itron's Proposed Half-Duplex Operations Are One-Way.

There is an additional reason why USA Mobility's arguments relating to two-way service are misplaced. As Itron explained in its Request, it is not seeking to engage in two-way operations, but rather to perform half-duplex communications.¹⁶ That is, at any given time, each transmission path on Itron's system either will be inactive or will be used to send messages in only a single direction, either from a fixed or mobile reader to a fixed EP or repeater, or from a fixed EP or repeater to a fixed or mobile reader. For this reason, even if the 931 MHz rules were interpreted to require one-way communications, a waiver of the rules, which Itron requested out of an abundance of caution, should be unnecessary.

C. There is Good Cause for Granting a Waiver.

Even if the 931 MHz rules were deemed to require one-way service, and even if Itron's half-duplex service were deemed to be two-way, there would be good cause to grant Itron a waiver of the one-way requirement. Itron demonstrated in its Request that its half-duplex operations would serve the underlying interference objectives of any one-way requirement because: (i) Itron will comply with the emission mask specified in the rules; and (ii) limitations on Itron's effective radiated power and duty cycle ensure that Itron's system will have less interference potential than a one-way system

¹⁶ Request for Waiver at 3 and 5-6.

operating with maximum facilities.¹⁷ Itron further demonstrated that a waiver of any one-way requirement would serve the public interest by making possible the more efficient use of the spectrum in furtherance of the national priority of increasing the reliability of this nation's electric grid.¹⁸

In making these demonstrations, Itron relied upon pertinent judicial and Commission precedent.¹⁹ There is no need to restate this prior discussion. Itron notes, however, that a waiver decision issued by the Commission's Office of Engineering and Technology ("OET") less than two weeks ago, which permitted fixed operations under Part 15 rules that apply to mobile devices, also has relevance.²⁰ There, OET found that "a fixed device operating [as proposed in the waiver request] has no greater potential to cause harmful interference to authorized services and protected users than does a mobile device operating at or below [the same power]. Hence, granting this waiver will not undermine the purpose of the rules."²¹ A similar rationale applies in this case.

USA Mobility made no effort to distinguish the precedents Itron cited. The cases on which USA Mobility relies, moreover, are inapposite.²²

¹⁷ *Id.* at 6 and in Technical Statement of Dan Seely attached thereto ("Initial Technical Statement").

¹⁸ *Id.* at 2-5 and 7-9.

¹⁹ *Id.* at 3 and notes 7, 8, and 9.

²⁰ *In the Matter of Spectrum Bridge, Inc. and Meld Technologies, Inc., Request For Waiver Of Sections 15.711(b)(2) and 15.711(b)(3)(ii) of the Rules*, Order, ET Docket No. 13-81, DA 13-1902 (Chief OET, Sep. 16, 2013).

²¹ *Id.* ¶12.

²² USA Mobility also opposes Itron's waiver request based on the fact that paging systems operating on USA Mobility's adjacent channels are used for public safety purposes. *See, e.g.*, Comments of USA Mobility at 2, 4. Itron has demonstrated, however, that its proposed operations will protect these services, so there is no issue with adjacent channel services.

For example, in the DISH case cited, which was a transfer of control proceeding, the Commission determined that various requests for waiver would be more appropriately considered either in another pending proceeding or, pursuant to previously announced Commission plans regarding its reallocation of spectrum, in a rulemaking proceeding.²³ Thus, the quoted statement regarding rulemaking proceedings was specific to a situation in which the Commission was already involved in a broader rulemaking and spectrum reallocation efforts, and does not apply to the present case.

With regard to the FreePage decision, which concerned a request to provide broadcast audio programming on paging channels, FreePage, which had filed *pro se*, had not provided enough information for the Commission to determine whether a waiver would be in the public interest.²⁴ Additionally, FreePage's requested use of the frequencies was likely to interfere with a planned allocation of spectrum on adjacent frequencies.²⁵ Neither of these circumstances is present here.

The last waiver case cited by USA Mobility involved Omnitronics. According to USA Mobility, Omnitronics' waiver request was denied "because Omnitronics failed to provide details sufficient to address interference concerns and its request implicated the

²³ *New DBSD Satellite Services G.P., Debtor-In-Possession Terrestrial Licensee Inc., Debtor-In-Possession Requests for Rule Waivers and Modified Ancillary Terrestrial Component Authority*, Order, 27 FCC Rcd 2250 at 2261-2262 (2012).

²⁴ *In the Matter of FreePage Corp., Request For Waiver of Section 22.323, Experimental License, and Developmental License*, Order, 15 FCC Rcd 2556 at 2558 (2000).

²⁵ *Id.* at 2559.

fundamental purpose of the applicable rule.”²⁶ That is the precise opposite of what happened here. Itron has made a thorough technical demonstration and has shown that its proposed operations are consistent with any interference concerns underlying the rule.

IV. USA MOBILITY’S TECHNICAL ARGUMENTS LACK MERIT.

Itron demonstrated in its Request for Waiver (“Request”) that it will operate within the emission mask that is permitted under the Commission’s rules and that its system has less interference potential than a traditional paging system operating with maximum facilities. As set forth in the attached Technical Statement of Itron’s Senior Principal Systems Engineer, Dan Seely (“Further Technical Statement”), multiple factors support this showing. Among other things, Itron’s “reader” units will operate with an ERP of no more than 100 watts, and typically will operate at 40 watts ERP or less. The ERP for Itron’s customer-premises “endpoint” units will be even lower, on the order of 0.5 to 2 watts.²⁷ These levels are all well below the maximum ERP permitted under the Commission’s rules, which is 3500 watts.²⁸ USA Mobility indicates that its systems operate at this maximum level.²⁹

Although USA Mobility takes issue with Itron’s interference showing, USA Mobility’s technical arguments do not withstand scrutiny. Each of these technical arguments is addressed below.

²⁶ Comments of USA Mobility at 10.

²⁷ Further Technical Statement at 1.

²⁸ 47 C.F.R. § 24.132(c).

²⁹ USA Mobility Comments at 3.

A. USA Mobility's Paging Receivers Should Be As Sensitive Or More Sensitive To Interference From Traditional Paging Systems As They Are To Interference From Itron's System.

USA Mobility asserts that its paging receivers would be especially sensitive to interference from Itron's proposed operations. As explained by Mr. Seely, that assertion has no basis in engineering fact. Paging receivers are no more sensitive than any other well designed device operating at similar bandwidths and data rates.³⁰

Further, Itron's proposed operations have less interference potential than traditional paging systems, not more. USA Mobility's paging receivers need to be prepared to operate in an environment in which other paging systems are transmitting with an ERP of up to 3500 watts, which is well above the ERP that Itron will employ.³¹ If USA Mobility's paging receivers are prepared to operate in a traditional paging environment, therefore, they are of necessity prepared to co-exist with Itron's system, as was demonstrated in the engineering statement and signal mask graph that accompanied Itron's Request.³²

³⁰ Further Technical Statement at 2. Mr. Seely also addresses USA Mobility's erroneous claim that the synchronization of paging system operations makes them more vulnerable to interference from Itron's proposed operations. *Ibid.*

³¹ *Ibid.*

³² See Request for Waiver, Initial Technical Statement.

B. USA Mobility's Contention Mitigation Argument Evinces a Lack of Understanding of RF System Design.

USA Mobility speculates that Itron's access methodology could lack contention mitigating techniques.³³ As pointed out by Mr. Seely, however, any qualified telecommunications engineer familiar with RF system design would understand that contention methods must be employed in a system such as Itron's to balance traffic loads.³⁴ Without such an access method design, Itron could not operate its system effectively while having multiple smart grid devices accessing the same spectrum channels on the same site at the same time. For this reason, Itron will use multiple methods of contention control.³⁵

C. Whether Itron's Endpoint Units Can Act As Repeaters Is Irrelevant.

USA Mobility complains that interference potential could be increased if any of Itron's endpoints serve as repeaters, because repeaters could have an increased duty cycle.³⁶ Even taking into account the potential use of repeaters, however, Itron's system, in the aggregate at any location, will have a duty cycle of well under 100%. From a duty cycle perspective alone, this means that Itron's system has less interference potential than the fully loaded conventional paging systems for which USA Mobility must be prepared. Further, as stated above, Itron's system will have significantly less interference potential than a conventional paging system because

³³ USA Mobility Comments at 4-5.

³⁴ Further Technical Statement at 2-3.

³⁵ *Id.* at 3.

³⁶ USA Mobility Comments at 5.

Itron will employ only a fraction of the effective radiated power that is permitted under the Commission's rules.³⁷ Whether Itron's endpoint units will serve as repeaters, therefore, is irrelevant.

D. Itron Will Not Seek to Limit USA Mobility's Operations.

USA Mobility suggests that Itron might ask the FCC to limit USA Mobility's operations because of the potential for interference from USA Mobility's systems to Itron's system.³⁸ There is no basis for this suggestion.

As stated by Mr. Seely, Itron understands the parameters at which incumbents are authorized to operate in the band.³⁹ Itron stipulates that it sees no need to require USA Mobility or any other incumbent to alter those parameters. Itron's engineering staff is well acquainted with the technical characteristics of paging systems, and Itron has designed its system to tolerate transmissions from other users of the band. There is, moreover, as pointed out by Mr. Seely, already a proven track record in the band; paging systems have co-existed on these channels for decades.⁴⁰

E. Itron's Equipment Will Be Tested and Authorized Under the Commission's Rules.

USA Mobility questions whether Itron can be relied on to comply with the emissions mask specified in Itron's Request.⁴¹ Itron is no different in this respect, however, from the many FCC licensees that must comply with emissions masks and

³⁷ Further Technical Statement at 3.

³⁸ USA Mobility Comments at 5-6.

³⁹ Further Technical Statement at 3.

⁴⁰ *Ibid.*

⁴¹ USA Mobility Comments a 6-7.

other technical requirements. Like these other licensees, Itron will have to test its equipment in accordance with the FCC's requirements for type approval.

Itron has a long history of satisfying these requirements. Itron designs, tests, and manufactures millions of devices each year in accordance with its FCC equipment authorizations.⁴² Mr. Seely makes clear that Itron will take the same care it always has taken to ensure that the FCC's technical standards are satisfied.⁴³

CONCLUSION

For the reasons stated herein and in Itron's Request, USA Mobility's arguments should be rejected and the Request should be granted.

Respectfully submitted,

ITRON, INC.

By: /s/ Joseph A. Godles
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September 24, 2013

⁴² Further Technical Statement at 4.

⁴³ *Ibid.*

Technical Statement of Dan Seely

This Technical Statement has been prepared in support of Itron's reply to the Comments of USA Mobility in WT Docket No. 13-195.

Qualifications of Mr. Seely

Mr. Seely is a Senior Principal Systems Engineer at Itron. He has 29 years of work experience in the wireless industry. Mr. Seely has specialties in wireless testing and designing RF test equipment such as spectrum analyzers, measuring receivers, and signal generators. He has extensive experience in the design, testing, and measurement of wireless communications products for conformance with numerous industry standards and FCC regulatory requirements.

Discussion

Itron demonstrated in its Request for Waiver ("Request") that it will operate within the emission mask that is permitted under the Commission's rules and that its system has less interference potential than traditional paging systems. Multiple factors support this showing. Among other things, Itron's "reader" units will operate with an ERP of no more than 100 watts, and typically will operate at 40 watts ERP or less. The ERP for Itron's customer-premises "endpoint" units will be even lower, on the order of 0.5 to 2 watts. These levels are all well below the maximum ERP permitted under the Commission's rules, which is 3500 watts. USA Mobility indicates that its systems operate at this maximum level.

USA Mobility takes issue with Itron's conclusion that its system has less interference potential than traditional paging systems. USA Mobility's technical arguments, however, do not withstand scrutiny. Each of these arguments is addressed below.

A. USA Mobility's Paging Receivers Should Be As Sensitive Or More Sensitive To Interference From Traditional Paging Systems As They Are To Interference From Itron's System.

USA Mobility asserts that its paging receivers would be especially sensitive to interference from Itron's proposed operations. That assertion has no basis in engineering fact.

Paging receivers are no more sensitive than any other well designed device operating at similar bandwidths and data rates. The standard protocols used in paging systems are traditional 2 and 4 level FSK on 20 and 25 KHz channels running from 512 BPS to 6.4 KBPS. Itron's Smart Grid devices will operate at very similar sensitivities and bandwidths.

Further, Itron's proposed operations have less interference potential than traditional paging systems, not more. USA Mobility's paging receivers need to be prepared to operate in an environment in which other paging systems are transmitting with an ERP of up to 3500 watts, which is well above the ERP that Itron will employ. If USA Mobility's paging receivers are prepared to operate in a traditional paging environment, therefore, they are of necessity prepared to co-exist with Itron's system, as was demonstrated in the engineering statement and signal mask graph that accompanied Itron's Request.

USA Mobility's assertion that the synchronization of paging system operations makes them more vulnerable to interference from Itron's proposed operations also is erroneous. The fact that Itron will be operating at a different data rate, modulation index, and base time framing than traditional paging systems makes it less likely, not more likely, that there would be cross-synchronization with pagers operating on adjacent channels.

B. USA Mobility's Contention Mitigation Argument Evinces a Lack of Understanding of RF System Design.

USA Mobility questions whether Itron's system will employ access methodology that lacks contention mitigating techniques. Anyone familiar with RF system design, however, would understand that contention methods must be

employed to balance traffic loads. Without such an access method design, Itron could not operate its system effectively while having multiple smart grid devices accessing the same spectrum channels on the same site at the same time. For this reason, Itron will use multiple methods of contention control.

C. Whether Itron's Endpoint Units Can Act As Repeaters Is Irrelevant.

USA Mobility complains that interference potential could be increased if any of Itron's endpoints serve as repeaters, because repeaters could have an increased duty cycle. Even taking into account the potential use of repeaters, however, Itron's system, in the aggregate at any location, will have a duty cycle of well under 100%. From a duty cycle perspective alone, this means that Itron's system has less interference potential than the fully loaded conventional paging systems that USA Mobility must be prepared for. Further, as stated above, Itron's system will have significantly less interference potential than a conventional paging system because Itron will employ only a fraction of the effective radiated power that is permitted under the Commission's rules. Whether Itron's endpoint units will serve as repeaters, therefore, is irrelevant.

D. Itron Will Not Seek to Limit USA Mobility's Operations.

USA Mobility suggests that Itron might ask the FCC to limit USA Mobility's operations because of the potential for interference from USA Mobility's systems to Itron's system. There is no basis for this suggestion.

Itron understands the parameters at which incumbents are authorized to operate in the band. Itron hereby stipulates that it sees no need to require USA Mobility or any other incumbent to alter those parameters. Itron's engineering staff is well acquainted with the technical characteristics of paging systems, and Itron has designed its system to tolerate transmissions from other users of the band. There is already a proven track record in the band; paging systems have co-existed on these channels for decades.

E. Itron's Equipment Will Be Tested and Authorized Under the Commission's Rules.

USA Mobility questions whether Itron can be relied on to comply with the emissions mask specified in Itron's Request. Itron is no different in this respect, however, from the many FCC licensees that must comply with emissions masks and other technical requirements. Like these other licensees, Itron will have to test its equipment in accordance with the FCC's requirements for type approval.

Itron has a long history of satisfying these requirements. Itron designs, tests, and manufactures millions of devices each year in accordance with its FCC equipment authorizations. Itron will take the same care it always has taken to ensure that the FCC's technical standards are satisfied.

I hereby certify that I am a technically qualified person responsible for the preparation of engineering information contained in this statement, that I am familiar with Part 22 of the Commission's rules, and that this statement is complete and accurate to the best of my knowledge.

By: /s/ Dan Seely

Dan Seely
Senior Principal Systems Engineer
Itron, Inc.

September 24, 2013

CERTIFICATE OF SERVICE

I hereby certify that on this 24th day of September, 2013, a copy of the foregoing
Reply of Itron, Inc. was sent by U.S. mail, postage prepaid, to the following:

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Deborah Wiggins