

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554**

In the Matter of

Biennial Regulatory Review –
Amendments of Parts 1, 22, 24, 27 and 90
to Streamline and Harmonize Various
Rules Affecting Wireless Radio Services

WT Docket No. 03-264

**REPLY COMMENTS OF MOTOROLA, INC.
TO THE FURTHER NOTICE OF PROPOSED RULE MAKING**

Motorola, Inc. (Motorola) hereby replies to comments submitted in response to the FCC's *Further Notice of Proposed Rule Making* in the above-captioned proceeding.¹

In this phase of the proceeding, the FCC seeks comments on proposals to modify the radiated power limits for broadband PCS services and, potentially, other commercial services regulated under Parts 22 and 27 of the Commission's Rules.²

Motorola submitted comments to the subject *Further Notice* and urged the Commission to modify the Broadband PCS and Part 27 Advanced Wireless Service (AWS) rules accordingly in order to permit stations in these two services with bandwidths greater than 500 kHz to operate within maximum limits of 3280 watts/MHz in non-rural areas and 6560 watts/MHz in rural areas.³ As originally proposed by CTIA, Motorola agreed that these proposals would increase licensee flexibility and promote

¹ *In the Matter of Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, Report And Order And Further Notice of Proposed Rule Making, WT Docket No. 03-264, FCC 05-144, 70 Fed. Reg. 60770 (2005) (“Further Notice”).*

² *Further Notice* ¶ 49.

³ Comments of Motorola to the Further Notice of Proposed Rulemaking, WT Docket No. 03-264, submitted December 19, 2005, at 2.

technology neutrality. Motorola indicated its strong preference for CTIA’s approach as opposed to the alternatives discussed in the *Further Notice* to simply establish higher fixed power limitations for wider bandwidth transmissions because establishing fixed “stepped” EIRP maximums would, inevitably, handicap some future technology designs with bandwidths on the “wrong-side” of the demarcation lines.⁴

Motorola also voiced its strong support for that aspect of the CTIA proposal to specify the EIRP radiated limits by considering average output power as opposed to peak values because the measurement of average power can be performed with greater measurement certainty and is consistent with most technology standards specifications.⁵ Finally, Motorola urged the Commission to defer implementing these rule changes in either the 800 MHz cellular band or the 2500 Broadband Radio Service (BRS) and Educational Broadband Service (EBS) band.⁶ Motorola argued that both of those bands will be undergoing significant restructuring over the next several years and, at least in the interim, will support a mixture of technologies and services and, therefore, do not provide the appropriate operational environments to support the power spectral density approach. Motorola did, however, support the proposal from Crown Castle to apply the power spectral density approach to the 1670-1675 MHz band.⁷

⁴ *Id.* at 3.

⁵ *Id.* at 4.

⁶ *Id.* at 4, 5.

⁷ *Id.* at 5.

Motorola's positions were supported by the other commenters responding to the *Further Notice*. All commenters supported the adoption of the power spectral density approach as proposed by CTIA as a fundamental concept applicable for Broadband PCS and AWS services.⁸ In addition, commenters also supported the use of average power measurements for determining power spectral density.⁹ Ericsson further recommended that the Commission expand the policy and allow average power measurements for mobile and portable units arguing that such a change would provide for a consistent application of the FCC's rules without leading to an increase in interference.¹⁰ The Wireless Communications Association International, Inc. and the National Public Safety

⁸ See, e.g., Comments Of CTIA – The Wireless Association at 6 (“*adoption of the CTIA proposal will make the transition to wideband systems easier and will enhance the deployment of high-speed wireless data services – particularly in rural areas where there are widely spaced coverage cells*”); Comments Of Qualcomm Incorporated In Response To Further Notice Of Proposed Rulemaking at 2 (“*[a]doption of a spectral density-based limit, as CTIA has proposed, will achieve technology neutrality, and at the same time, CTIA’s proposal ensures that the narrower bandwidth technologies are not disadvantaged in any way*”); Comments Of Ericsson Inc at 5 (“*Ericsson . . . strongly supports increasing EIRP limits, particularly for wideband systems, to ensure technological neutrality, encourage innovation, and promote deployment of wireless technologies . . . [and] CTIA’s proposal, representing broad industry consensus, will best achieve these goals*”). All cited comments were submitted in WT Docket No. 03-264 on December 19, 2005.

⁹ See, e.g., Comments of Qualcomm at 9 (“*Qualcomm believes that the Commission’s PCS base station power limit should regulate average power during transmission and that the Commission should not impose a limit on peak to average ratio because such a limit would not reduce the potential for interference, but would reduce the transmission capacity of CDMA base stations*”); Comments of Ericsson at 14 (“*[b]y adopting average power as its measurement basis, the Commission will ensure that the radiated power limits specified in its administrative rules are technology neutral, consistent with prior official direction and industry standards, as well as harmonized with its measurement method for OOB*”).

¹⁰ Comments of Ericsson at 21, 22. Motorola has considered this recommendation and agrees with Ericsson provided that the Commission’s rules make clear that the average measurements are performed during active transmission time.

Communications Council agreed with Motorola's position that it is premature to adopt new power limitations in either the 2.5 GHz band or the 800 MHz.¹¹

In short, the CTIA proposals discussed in the *Further Notice* were unanimously supported by the commenters. Thus, the FCC should move expeditiously to adopt these recommendations for Broadband PCS and AWS services. The Commission should not be dissuaded from swift action by the comments of Terrestar, which is solely concerned about the potential impact to 2 GHz MSS services from AWS H-Block systems operating under the proposed power requirements.¹² As Terrestar points out, the technical standards for H-Block systems, including the protection criteria for 2 GHz MSS systems, are under review in another FCC proceeding.¹³ Terrestar's concerns are more appropriately considered there and, in the meantime, there is no reason to deny other Broadband PCS and AWS licensees from the benefits that these proposals offer.

¹¹ See Comments On Further Notice Of Proposed Rulemaking, The Wireless Communications Association International, Inc. at 2, 3 (“*WCA urges the Commission not to revisit here the power limits applicable to BRS and EBS base stations*”). See also, Comments Of The National Public Safety Telecommunications Council at 6 (“*the Commission's 800 MHz decision is too far reaching and its technical underpinnings too reliant on current rules addressing power levels to change either the standard by which power is measured or to increase the power of a transmitter until reconfiguration is completed*”).

¹² Comments Of Terrestar Networks Inc., at 1 (“*[Terrestar] urges the Commission to ensure that any power increase be accompanied by sufficient safeguards in the H block to protect the viability of innovative Mobile Satellite Services (“MSS”) with Ancillary Terrestrial Component (“ATC”) in the adjacent 2 GHz band*”).

¹³ *Id.* at 2.

The public interest is served by FCC rules that are technically harmonized and technology neutral. Motorola commends the Commission for its continuing efforts to update and improve its rules and urges it to act expeditiously to implement the changes recommended herein.

Respectfully submitted,
Motorola, Inc.

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