

Before the
Federal Emergency Management Agency
Washington, DC 20472

In the Matter of)
)
Draft Programmatic Assessment for the) Docket ID FEMA-2008-0014
Evaluation of the Grant Programs Directorate's)
Programs: Draft Memorandum of)
Understanding between FEMA and the U.S.)
Fish and Wildlife Service)

**JOINT COMMENTS OF THE INFRASTRUCTURE COMMENTERS:
CTIA–THE WIRELESS ASSOCIATION[®],
THE NATIONAL ASSOCIATION OF BROADCASTERS, AND
PCIA–THE WIRELESS INFRASTRUCTURE ASSOCIATION**

INTRODUCTION AND SUMMARY

CTIA–The Wireless Association (“CTIA”),¹ the National Association of Broadcasters (“NAB”),² and PCIA–The Wireless Infrastructure Association (“PCIA”)³ (the “Infrastructure Commenters”), hereby file comments in the above-captioned proceeding. The Infrastructure Commenters recognize that the draft Memorandum of Understanding (“MOU”) between FEMA and the U.S. Fish and Wildlife Service (“FWS”) will not directly apply to broadcasters or commercial wireless network operators. Nevertheless, the Infrastructure Commenters are filing these comments because we are concerned that: (1) several MOU recommendations appear to be

¹ CTIA–The Wireless Association[®] is the international organization of the wireless communications industry for both wireless carriers, manufacturers and suppliers. Membership in the organization covers Commercial Mobile Radio Service (“CMRS”) providers and manufacturers, including cellular, Advanced Wireless Service, 700 MHz, broadband personal communications service (“PCS”), and enhanced specialized mobile radio (“ESMR”), as well as providers and manufacturers of wireless data services and products.

² NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and also broadcast networks before Congress, the FCC and other federal agencies, and the courts.

³ PCIA is a non-profit national trade association representing the wireless infrastructure industry. PCIA’s members develop, own, manage, and operate over 125,000 towers, rooftop wireless sites, and other facilities for the provision of all types of wireless services.

unlawful and could (albeit inadvertently) jeopardize air safety; and (2) adoption and “export” to the FCC of the MOU in its current form could have the unintended effect of crippling FCC licensees’ infrastructure deployment.⁴

The Infrastructure Commenters represent diverse sectors of the communications industry — CTIA’s members include providers of wireless voice and data services, NAB’s members include radio and television broadcasters, and PCIA’s members include providers of towers and other infrastructure for the communications industry. Infrastructure Commenters’ members construct, modify, own, operate, lease and manage hundreds of thousands of communications towers, which provide valuable wireless and broadcasting services to the public nationwide.

More importantly, the FCC licensees that are members of the Infrastructure Commenters’ associations provide the American people with radio and television programming (news, sports, entertainment, local and emergency information), public safety radio communications, as well as wireless phone service, email, and access to the Internet and other interactive information services. The only manner in which these services can continue to expand and new services can be offered is if tower siting can keep pace with this unrelenting public demand.

Now that the Executive Branch, the Congress, and the FCC have identified nationwide broadband buildout as a national priority,⁵ the need for timely buildout of essential

⁴ To the extent that the Programmatic Environmental Assessment (“PEA”) embodies the same issues discussed herein, the comments of the Infrastructure Commenters apply equally to the PEA. However for the same reasons as discussed herein concerning the MOU, the Infrastructure Commenters would object to the employment of a similar PEA in the FCC arena.

⁵ See, e.g., Remarks by the President and the Vice President at the Signing of the American Recovery and Reinvestment Act, February 17, 2009, *available at* http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-and-Vice-President-at-Signing-of-the-American-Recovery-and-Reinvestment-Act/; U.S. Dept. of Commerce Letter to Chairman Genachowski, FCC, GN Docket No. 09-51 at 2 (filed Jan. 4, 2010); *Ex Parte* Submission of the U.S. Dept. of Justice, GN Docket No. 09-51 (filed Jan. 4, 2010) (“*DOJ Broadband NOI Ex Parte*”); American Recovery and Reinvestment Act, Pub. L. 111-5, at § 6001(k)(2); FCC Joint Statement on Broadband, 25 FCC Rcd 3420 (2010).

infrastructure, including towers, becomes even more acute. The Infrastructure Commenters believe that the only way in which FCC licensees can keep up with the increasing demand for new wireless and broadcast services is to have federal regulatory tower siting policies that promote timely buildout while still abiding by applicable environmental and air safety regulations.

DISCUSSION

I. THE DRAFT MOU'S PROHIBITION ON CERTAIN LIGHTING SCHEMES WOULD EFFECTIVELY FORCE TOWER OWNERS TO VIOLATE FAA REQUIREMENTS

Several provisions of the draft MOU would prohibit the use of L-810 lights, which are red lights mounted along the sides of certain towers:

All new and re-issued licensed towers should be fitted in decreasing order of priority with white strobes, red strobes, or blinking incandescent lighting, and *no L-810 side lights should be used.*⁶

* * *

When L-810 lights on existing towers burn out, they should each be replaced in decreasing order of priority with white strobe, red strobe, or red blinking incandescent lighting.⁷

* * *

Upon re-issuance of tower broadcast licenses, *tower lighting systems must be retrofitted* Pending FAA approval, *all L-810 steady burning red lights should also be removed.*⁸

* * *

All towers be retrofitted within 5 years of the effective date of this MOU *No L-810 side lights should be used.*⁹

⁶ MOU at § F.1.b.3 (emphasis added).

⁷ MOU at § F.1.c.1 (emphasis added).

⁸ MOU at § F.1.c.2 (emphasis added).

⁹ MOU at § F.1.c.3 (emphasis added).

These MOU “recommendations” — which are phrased as requirements — are contrary to law. The Federal Aviation Administration’s (“FAA”) *Advisory Circular: Obstruction and Marking and Lighting*, AC 70/7460-1K (February 1, 2007) (“*Circular*”) prescribes six different lighting schemes that every tower owner that requires an FAA Determination of No Air Hazard must follow.¹⁰ In fact, the FAA’s *Circular* requires tower owners to install L-810s under three of the six FAA Lighting Schemes.¹¹ Thus, the removal or extinguishment of L-810s lights as contemplated in the MOU would effectively force tower owners to violate these FAA lighting requirements.

The Infrastructure Commenters note that, although currently required, L-810s may not be required in the future. For over a year the FAA has planned to conduct a conspicuity study that would assess whether L-810s can be eliminated or reduced without adversely affecting air safety, but the study has not yet begun. Tower owners could not lawfully extinguish their L-810s until such time as the FAA (1) completes its conspicuity study, (2) decides that the extinguishment of L-810s would not pose a hazard to air navigation, and (3) formally revises its *Circular* to permit the extinguishment of L-810s. At this time, however, tower owners opting not to install L-810s and opting to extinguish existing L-810s would be violating FAA regulations and possibly endangering air safety. Thus, tower owners do not have the discretion to eliminate these fixtures, as the MOU suggests.

As noted above, these putative “recommendations” are actually phrased as requirements. In practice, they would become mandatory standards, because a tower owner’s failure to comply with the MOU’s recommendations would result in the tower owner being subjected to review by

¹⁰ The specific FAA Lighting Schemes that a tower owner may utilize depend on the overall height of the tower in question.

¹¹ See *Circular*, ch. 4-6, available at [http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/b993dcdcf37fcdc486257251005c4e21/\\$FILE/AC70_7460_1K.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/b993dcdcf37fcdc486257251005c4e21/$FILE/AC70_7460_1K.pdf).

both FEMA and FWS. Because FWS is a party to the MOU, and the provisions of the MOU are phrased in the imperative, it is reasonable to expect that the FWS will oppose a tower that fails to satisfy the MOU's recommendations, therefore resulting in a delay of indeterminate length in the buildout of such a tower. Thus, these "recommendations" form a *de facto* standard that tower owners will be expected to meet.

II. THE MOU'S SPECIFICATIONS FOR TOWER HEIGHTS AND NUMBER OF COLLOCATORS ARE UNREALISTIC AND UNWORKABLE

The MOU also seeks to have tower owners accomplish what is highly impractical and potentially impossible — namely, design their towers to accommodate six to ten additional collocators¹² while keeping the towers under 200 feet in height.¹³ At the outset, it is important to point out that this requirement appears to mandate that the tower accommodate six to ten collocators *in addition to* the antennas of the tower owner (assuming the tower owner is also an operator of a radio system). As it is not uncommon for a licensee that owns a tower to utilize multiple antennas, *the MOU potentially is requiring a tower with a maximum height of 199 feet to accommodate 11 or more sets of antennas.*¹⁴ Due to the laws of physics and the need to prevent radiofrequency ("RF") interference, these are mutually exclusive objectives. Sufficient vertical spacing buffers between the various sets of antennas are necessary to prevent RF

¹² MOU at § F.1.b.1. We recognize that the MOU uses terms such as "when possible" and "where practicable," but if it will rarely or never be possible to comply with two conflicting provisions, those provisions, if they are retained, should be phrased in the alternative, rather than appearing to be independent mandates. As the MOU is written currently, it does not appear to be possible for a grant recipient to certify that its proposed tower will comply with the "recommendations" in the MOU and, as a result, conceivably every applicant will have to provide an explanation for why it is not able to comply with two mutually exclusive recommendations. Such an outcome for each application will result in a highly inefficient process of indeterminate length.

¹³ MOU at § F.1.b.2.

¹⁴ For example, it is not unusual for a cellular wireless carrier that owns a tower to place both its cellular antennas and one or more microwave antennas on the tower.

interference among the collocators.¹⁵ As a result, it is highly impracticable, if not impossible, for a tower measuring 199 feet or less to accommodate seven to eleven sets of collocated antennas (assuming just one set of antennas owned by the tower owner). If the antennas are separated by ten to fifteen feet, which is common to provide sufficient vertical spacing buffers, merely the spacing between the seven sets of antennas alone will take up 60 to 90 feet of tower space, in addition to the heights of the antennas. Thus, for a 199-foot tall tower, the lowest collocated set of antennas would likely be lower than 100 feet above ground, which in many situations will not permit a facility to produce a reliable signal of sufficient coverage, and would result in some operators not being able to provide reliable service. Moreover, because the propagation of radio signals varies widely, depending on their frequency, effective radiated power (“ERP”), and channel loading, multiple collocators operating on vastly different frequencies will find space on a given tower limited. Further, the collocators whose frequencies have shorter propagation characteristics and ERP limited by regulation will be challenged to be able to provide reliable service.

In addition to the laws of physics, other factors render the MOU’s collocation/tower height paradigm unattainable. Real-world issues including signal blockage due to terrain or man-made structures, or overcoming interference, often militate toward the need for towers to be over 200 feet in height to provide an adequate signal. Some services, such as microwave service, are line-of-sight, meaning that the RF is a small focused beam that must avoid all terrain or man-made obstacles in order for the signal to reach the receiver at the other end of the microwave path. Further, it is often impossible to engineer a tower that is 199 feet or less that would have

¹⁵ The amount of vertical spacing required between antennas will vary based on a variety of factors. The traditional rule of thumb is to allow at least fifteen feet of vertical spacing between antennas, although the use of advanced planning tools can allow lesser spacing. *See, e.g.,* Robert S. Mawrey, UNISite, *Radio Frequency Interference and Antenna Sites* at 9, available at <http://sss-mag.com/pdf/1interference.pdf>.

sufficient physical strength, cabling capacity, and wind load capability to accommodate six to ten collocators. For the reasons explained above, the MOU's specifications regarding tower height and number of collocators is impractical and unworkable and should be deleted.

III. THE ONEROUS BURDENS SET FORTH IN THE MOU YIELD LITTLE BENEFIT AND COULD THREATEN INFRASTRUCTURE BUILDOUT

As noted above, Infrastructure Commenters are commenting on the draft FEMA MOU in part because of its potential to serve as precedent for a similar set of principles to be applied to FCC licensees. This would have unintended, dangerous consequences. The number of towers potentially affected by the FEMA MOU is dwarfed by the number of FCC registered towers. While FEMA grants involve about 300 towers per year,¹⁶ the FCC's Antenna Structure Registration database includes more than 112,000 registered towers. Thus, applying principles similar to those proposed here to FCC-licensed facilities would place a dramatically greater burden on the resources of FCC licensees, as well as FCC and FWS staff, with no concomitant benefit.

A. Lack of Deadlines

The draft MOU contemplates a complex set of procedures entailing review and feedback by both FEMA and the FWS. It does not, however, establish meaningful deadlines for agency action. The only provision even resembling a deadline is one that would urge, but not require, the FWS to review and comment on forms and other documents "as early as practicable, but ideally within a 30 day window of receipt."¹⁷ With no definitive action set to occur after a fixed time period, the entire process is completely open-ended and will inevitably result in significant delays even at the relatively small scale of 300 towers per year.

¹⁶ MOU at § C.

¹⁷ MOU at § G.5.

In contrast, if such an open-ended process were applied to over 112,000 existing towers, the results would be both predictable and devastating — it would cripple the ability to timely deploy facilities essential to the provision of wireless, broadcast and broadband services. With two agencies independently reviewing the same tower and with neither agency’s review period being finite, the review processes could easily add a year or more of delay. Such a delay would occur at the very time that the President, Congress and the FCC have called upon tower owners and carriers to accelerate the pace of infrastructure buildout so as to facilitate the growth of wireless broadband Internet access.¹⁸

B. Effect on Emergency Services

We are also concerned that the increased costs, uncertainties and delay involved with such a program would adversely affect public safety licensees’ ability to provide emergency services as well as wireless, broadcast and broadband emergency services. As state, local and tribal public safety organizations are often the first responders on the scene of life-threatening fires, accidents and natural disasters, we can ill afford to have their facilities subject to unnecessary and avoidable delays.

C. Burdensome Tower Site Evaluation Form

The draft MOU requires a Tower Site Evaluation Form to be submitted for every FEMA-funded tower, whether or not the tower exceeds the FWS recommendations set forth in the MOU.¹⁹ In every case, this form must be completed by a “qualified environmental professional”²⁰ and would require significant effort, time and capital to complete.²¹ While there

¹⁸ See *supra* note 5.

¹⁹ MOU at § F.4.b.i.

²⁰ *Id.*

²¹ Among other things, the Form would in each case require a determination of habitat type at the site and in the adjacent areas, the vegetative species types in each habitat type, the

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might be a justification for requiring a Tower Site Evaluation Form when the proposed tower would not meet the FWS standards, it is difficult to envision the benefit that would result from requiring such an undertaking for towers that satisfy the FWS “recommendations” (*i.e.*, requirements to avoid the need for FWS review). It is also difficult to imagine why, in every case, FEMA will forward copies of the form to the FWS *even when the FWS requirements are met and there is no need for FWS review*. Thus, the filing requirement should be eliminated when the FWS standards are satisfied.

D. The Tower Site Evaluation Form Cannot Lawfully Be Required

Under the Paperwork Reduction Act, 44 U.S.C. §§ 3501 *et seq.*, a federal agency may not conduct or sponsor a collection of information such as a form without undertaking a paperwork clearance process and receiving a control number from the Office of Management and Budget, and displaying that control number and other specified information on the collection of information or form.²² Under the draft MOU, FEMA would require grantees to compile extensive information, complete the form and submit it to FEMA. Accordingly, FEMA and FWS are required to engage in the Paperwork Reduction Act clearance process before requiring grantees to collect this information. The form specified in the draft MOU, which is maintained on the FWS website,²³ does not display a control number.²⁴ Thus, it appears that neither FEMA nor FWS have completed the requisite OMB approval which entails, among other things,

(footnote continued)

characteristics of trees, evidence of bird roosts or rookeries (not limited to migratory species), and distances to wetlands and other communications towers. *See* http://www.fws.gov/habitatconservation/TOWER_SITE_EVALUATION_FORM.pdf.

²² *See* 44 U.S.C. §§ 3507(a), 3512(a).

²³ http://www.fws.gov/habitatconservation/TOWER_SITE_EVALUATION_FORM.pdf.

²⁴ It also does not inform a potential respondent that there is no requirement to participate in a collection of information lacking a control number, as the Paperwork Reduction Act requires. *See* 44 U.S.C. § 3512(a).

estimating the burden that compiling the needed information, completing the form, and processing it will impose on both the public and the government, as well as the benefits expected from this collection of information.²⁵

IV. THE MOU SUGGESTS A SCOPE FAR BROADER THAN PROTECTING MIGRATORY BIRDS

Although the title of the MOU states clearly that it is designed to meet FEMA’s responsibility to protect migratory birds, there are several references in the MOU (which appears to have been prepared solely by FWS²⁶) that suggest that the scope of the MOU is actually far broader than the protection of migratory birds, extending perhaps to non-migratory and non-endangered birds.²⁷

First, in the Statement of Purpose, the MOU states that its “purpose . . . is to establish procedures to be utilized by the Parties to monitor, assess, minimize and avoid *avian mortalities* at telecommunications towers funded by FEMA’s various grant programs and at FEMA-owned towers.”²⁸ It is not limited to mortality of *migratory* birds, thus implying that the MOU is aimed at protecting both migratory and *non-migratory* birds.

²⁵ We note that unless the agency has engaged in this process, it cannot penalize any person for failing to comply with the unauthorized collection of information. 44 U.S.C. § 3512(a). The OMB approval process is not limited to the form, but to the entire collection of information, whether or not such information must be submitted on the form.

²⁶ The draft includes the name of the FWS signatory, but for FEMA states, “[Insert FEMA Signatory].”

²⁷ The Infrastructure Commenters do not agree that concerns over the “potential impacts . . . associated with communications towers and associated infrastructure” have been scientifically validated, including the claim that “radiation” is a potential threat to migratory birds. MOU at § D ¶ 2.

²⁸ MOU at § A ¶ 2 (emphasis added).

Second, the MOU Definition Section includes a definition of “Birds of Conservation Concern” as well as “Species of Concern,”²⁹ neither of which is expressly limited to migratory bird species and thus appear to include non-threatened, non-endangered, and non-migratory birds within the scope of the MOU. The draft MOU therefore could be read to expand its protection far beyond migratory bird species.

Third, while the MOU often references “migratory birds,” there are nevertheless many sections of the MOU that refer to “birds” generally, without limitation.³⁰ Moreover, the Tower Site Evaluation Form required by the draft MOU asks about the presence of “bird roosts or rookeries,” without any limitation to those of migratory bird species.³¹ The Infrastructure Commenters respectfully suggest that if it is not the intent to expand the scope of the MOU beyond migratory birds, the MOU should be revised throughout to remove the ambiguous language noted above. On the other hand, if the MOU is intended to expand its scope beyond the protection of migratory birds, the title of the MOU should be revised, the statutory authority for the expanded scope should be set forth, and the impact of both the MOU and the Tower Siting Evaluation Form would have to include the resources required to meet the expanded scope of the MOU.

CONCLUSION

The draft MOU, as currently proposed, would have the unintended consequences of endangering air safety and requiring FEMA grantees to violate FAA regulations. In addition, FEMA is engaging in a process that may have much broader effects than anticipated, because this MOU may be used as a model or precedent in future agency negotiations with FWS.

²⁹ MOU at § F (Definitions).

³⁰ MOU at §§ C.FWS, C.FWS.1, C.FWS.2, D ¶ 2, D ¶ 3, E.1.b, E.2.c, E.2.d, E.3, F.4.c.i-iii, G.2, G.2.c-e.

³¹ Tower Site Evaluation Form at question 14.

Accordingly, while the MOU may initially adversely affect only 300 FEMA grantee towers per year, it will have a far greater impact on federal and private resources if it were to be used as a model to be applied to over 112,000 FCC-licensed facilities. The Infrastructure Commenters urge FEMA to revise its draft MOU with the FWS to eliminate: (a) unlawful, inefficient or impracticable limitations on towers that would require detailed explanations and open-ended review, (b) the need to complete and file burdensome forms for towers that meet the requirements for avoidance of FWS review, (c) the forwarding of forms to FWS where no FWS review is needed, and (d) vague and ambiguous references in the MOU that would suggest that the MOU's scope goes beyond migratory bird species. FEMA and FWS must also comply with the terms of the Paperwork Reduction Act prior to collecting any data from FEMA applicants.

Respectfully submitted,

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