Federal Communications Commission
Washington, D.C. 20554

03-187

March 27, 2009

FILED/ACCEPTED

MAR 27 2009

Federal Communications Commission
Office of the Secretary

Mr. Alexander Roe
P.O. Box 303
Mendenhall, PA 19357

Dear Mr. Roe:

Thank you for your March 11 email to Acting Chairman Michael J. Copps, in which you request that the Federal Communications Commission implement the United States Fish and Wildlife Service's (FWS) "Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommissioning" (2000) (Guidelines). These FWS Guidelines advise, among other things, to the extent feasible: collocation of new antennas on existing communications towers or other structures rather than on newly constructed towers; where collocation is not feasible, construction of new towers that are not taller than 199 feet above ground level without guy wires or lighting; siting new towers within existing tower farms; and use of the minimum acceptable amount of lighting that the Federal Aviation Administration (FAA) recommends for aviation safety.

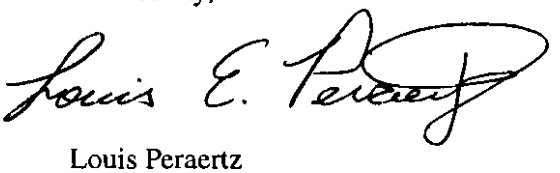
The Commission is considering the recommendations that FWS presented in its Guidelines in a docketed proceeding entitled "In the Matter of Effects of Communications Towers on Migratory Birds." The docket number of the proceeding is WT Docket No. 03-187. In November 2006, the Commission adopted a Notice of Proposed Rulemaking (NPRM) in that proceeding that sought comment on possible measures the Commission could take to reduce the number of instances in which migratory birds collide with communications towers. In particular, the NPRM sought comment on the recommendations in FWS's Guidelines that you reference. It also sought comment on whether the use of certain types of tower lighting (*e.g.*, the use of medium intensity white strobe lights) for nighttime conspicuity should be considered the preferred lighting system over red obstruction lighting systems to the maximum extent possible without compromising aircraft navigation safety. In addition, the NPRM requested comment on other possible measures the Commission could take. Please find attached to this letter a copy of the NPRM.

The period for filing comments and reply comments in response to the NPRM closed in 2007. In response to the NPRM, the Commission received over 2,400 comments, including comments from FWS. The Commission is considering the information in those comments. Pursuant to the Commission's procedural rules, your inquiry will be placed in the migratory birds proceeding docket. You can access the record in the proceeding by going to http://fjallfoss.fcc.gov//prod/ecfs/comsrch_v2.cgi and entering 03-187 in the first box entitled "Proceeding."

In addition, the staff of the FAA has indicated that the FAA plans to conduct a conspicuity study with regard to the effect that the use of red strobe lights on communications towers without accompanying red steady lights has on aviation safety. The Commission is looking forward to receiving the results of this study as we consider what measures are appropriate to protect migratory birds while ensuring the safety of air navigation.

Thank you for sharing your concerns.

Sincerely,



Louis Peraertz
Special Counsel
Wireless Telecommunications Bureau
Federal Communications Commission

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

In the Matter of	)	
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Effects of Communications Towers on Migratory Birds	)	WT Docket No. 03-187
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NOTICE OF PROPOSED RULEMAKING

Adopted: November 3, 2006 **Released: November 7, 2006**

Comment Date: (60 days from publication in the Federal Register)
Reply Comment Date: (90 days from publication in the Federal Register)

By the Commission: Commissioners Copps, Adelstein, and McDowell issuing separate statements.

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over red obstruction lighting systems to the maximum extent possible without compromising safety. We seek comment on whether scientific evidence supports such a requirement and, if so, how it should be implemented. In addition, we request comment on the possible adoption of various other measures that might serve to mitigate the impact of communications towers on migratory birds.

II. BACKGROUND

4. Communications towers are part of the infrastructure necessary to provide many of the services licensed by the Commission, such as broadcast television and radio, cellular, Personal Communications Services ("PCS"), public safety systems and other advanced and emerging services. Although new communications antennas can often be collocated on existing towers or other structures such as buildings, in many instances the deployment of services requires construction of new antenna structures. Several factors, such as construction costs, government regulations, the availability of a willing landowner, and the engineering requirements of a service provider, can influence the decision whether to collocate a new communications antenna on an existing structure or construct a new tower. Designs of communications towers may differ. For instance, communications towers may be supported by guy wires or can be self-supporting, again potentially depending on various engineering, economic, environmental, or historic preservation factors.[4] Communications towers range widely in height, with many being under 100 feet above ground level (AGL), others over 1,000 feet AGL, and different heights in-between.

5. The Commission and the FAA each has statutory responsibilities related to ensuring that antenna structures do not present a hazard to air safety.[5] Specifically, Section 303(q) of the Communications Act of 1934, as amended (Communications Act), authorizes the Commission to prescribe painting and/or illumination of radio towers when there is a "reasonable possibility" that an antenna structure may cause a hazard to air navigation, and requires permittees, licensees, and tower owners to maintain such lighting and/or illumination.[6] Section 1501 of the Federal Aviation Act authorizes the FAA to require that persons proposing to erect a structure provide notice to the FAA, when such notice will promote air safety.[7] Under current rules, each tower owner proposing to construct or alter an antenna structure that is more than 200 feet (60.96 meters) in height, or that may interfere with the approach or departure space of a nearby airport runway, must notify the FAA of the proposed construction and must register the tower with the Commission.[8] The FAA considers whether the proposed structure constitutes a potential hazard, and may recommend appropriate painting and lighting for the structure.[9] The Commission requires that each owner or constructor of a proposed structure providing such notice to the FAA must, in turn, register the structure in the Commission's database, at

[4] For example, in some circumstances tower designs that present more intrusive profiles may be disfavored due to matters such as historic properties, wetlands, or endangered species.

[5] Streamlining the Commission's Antenna Structure Clearance Procedure, *Report and Order*, 11 FCC Rcd 4272 (1995) (*Antenna Structure Procedure Order*).

[6] 47 U.S.C. § 303(q); *Antenna Structure Procedure Order*, 11 FCC Rcd at 4274 ¶ 3; *see also* 47 U.S.C. § 503(b)(5) (providing that non-licensee antenna structure owners may be subject to forfeiture for violations of painting or lighting requirements as specified by the Commission).

[7] 49 U.S.C. § 44718.

[8] *See* 14 C.F.R. § 77.13 (FAA rules); 47 C.F.R. § 17.7 (FCC rules).

[9] 14 C.F.R. § 77.19(b); *see Antenna Structure Procedure Order* at 4274 ¶ 3.

particular substantive actions to protect the environment,[21] it requires federal agencies to establish procedures to identify and take into account the environmental impact of actions that they undertake or authorize.[22] Federal agencies must prepare an environmental impact statement (EIS) before taking any "major federal action[] significantly affecting the quality of the human environment."[23] Federal agencies must also obtain the comments of expert Federal agencies before taking any major action significantly affecting the quality of the human environment.[24] The Council on Environmental Quality (CEQ),[25] which Congress created to provide guidance on NEPA, has issued regulations that permit an agency to prepare a more limited Environmental Assessment (EA) in order to determine whether an EIS is necessary for a particular action.[26] An agency that decides, pursuant to an EA, that no EIS is required must issue a "finding of no significant impact" (FONSI).[27] A federal agency may also determine, pursuant to agency procedures, that certain types of actions are "categorically excluded," because such actions do not individually or cumulatively have a significant effect on the human environment, and therefore such actions normally do not require an EIS or EA.[28]

8. The ESA prohibits the taking of any endangered species by any person unless authorized by FWS.[29] The ESA also provides that "[e]ach Federal agency shall, in consultation with and with the assistance of the Secretary [of the Interior], ensure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence" of any endangered species or threatened species or result in the "destruction or adverse modification of habitat of such species which is determined by the Secretary . . . to be critical . . . ."[30] The MBTA makes it "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture or kill . . . any migratory bird" unless permitted by FWS.[31] Certain species of migratory birds are protected under the

[21] *Department of Transportation v. Public Citizen*, 541 U.S. 752, 756 (2004); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).

[22] 42 U.S.C. §§ 4321-4335; *Public Citizen*, 541 U.S. at 756; *Methow Valley Citizens Council*, 490 U.S. at 350.

[23] 42 U.S.C. § 4332(2)(C). CEQ's regulations define the "human environment" to include the natural and physical environment and the relationship of people with that environment. 40 C.F.R. § 1508.14.

[24] 42 U.S.C. § 4332(2)(C).

[25] 42 U.S.C. § 4321.

[26] 40 C.F.R. §§ 1501.3, 1508.9.

[27] 40 C.F.R. § 1501.4(e).

[28] 40 C.F.R. §§ 1501.4(a), 1508.4.

[29] 16 U.S.C. § 1538(a)(1)(B). Under the ESA, "take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Id.* § 1532(19). The ESA authorizes the Secretary of the Interior to permit any otherwise prohibited "taking" if "such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." *Id.* § 1539(a)(1)(B).

[30] *Id.* § 1536(a)(2). "Federal agency" includes any "department, agency, or instrumentality of the United States." *Id.* § 1532(7).

[31] *See* 16 U.S.C. §§ 703, 704(a). Although FWS issues migratory bird "take" permits for certain activities, it does not issue permits, under the MBTA, for incidental or accidental takes in the course of activities undertaken for purposes unrelated to migratory birds. U.S. Fish & Wildlife Service Manual, Part 724, Section 2 (dated August 6, 2003) (providing for permits to qualified applicants for the following types of migratory bird-related activities: import/export, scientific collecting, taxidermy, waterfowl sale and disposal, educational use, game bird propagation, salvage, falconry, raptor propagation, rehabilitation, control of depredating migratory birds, and special purpose activities).

communications towers, that may affect listed threatened or endangered species or designated critical habitats, or are likely to jeopardize the continued existence of any proposed endangered or threatened species or are likely to result in the destruction or adverse modification of proposed critical habitats, as determined by the Secretary of the Interior pursuant to the ESA.[38] Thus, applicants and licensees are routinely required to evaluate their tower projects, prior to construction, for effects on birds that are endangered, threatened, or otherwise subject to Section 1.1307(a)(3), and to file an EA if the terms of Section 1.1307(a)(3) are met. The Commission's rules authorize Commission licensees and applicants and their representatives to contact the Department of the Interior to determine whether their facilities will affect threatened or endangered species or designated critical habitats.[39] With respect to other birds, such as migratory birds, routine evaluation is not required, but an EA shall be required pursuant to Section 1.1307(c) or (d) if the Bureau processing an otherwise categorically excluded action finds, in response to a petition or on its own motion, that the proposed construction may have a significant environmental impact. The Commission has acted, under Section 1.1307(c), to consider the impact that proposed construction would have on migratory birds.[40]

11. Thus, the Commission's environmental rules require licensees, license applicants, and others subject to those provisions to evaluate, prior to construction, whether a proposed tower within one of the specified categories of facilities may have significant environmental impact.[41] In those instances where a site-by-site license, construction permit, or antenna structure registration is required for the facility, the entity must certify compliance with the environmental rules on the appropriate application form.[42] If an EA is not required, the party may proceed with the project without providing any

[38] 47 C.F.R. § 1.1307(a)(3).

[39] *See id.* § (a)(3); 47 C.F.R. § 1.1308 note; Letter from Susan H. Steiman, Associate General Counsel to Steve Williams, Director, U.S. Fish and Wildlife Service, U.S. Department of Interior, dated July 9, 2003.

[40] *See* State of Ohio Department of Administrative Services – Application for Antenna Structure Registration – Deersville, OH, *Memorandum Opinion and Order*, 19 FCC Rcd 18149, 18150-53 ¶¶ 6-14 (WTB/SCPD 2004) (reviewing whether a tower would have a significant impact on migratory bird species and endangered species); County of Leelanau, Michigan, *Memorandum Opinion and Order*, 9 FCC Rcd 6901, 6903 ¶ 8 & n.11 (1994) (addressing whether proposed tower would have a significant, adverse impact on migratory bird population as part of overall obligations to consider the impact of authorized facilities on the environment); Caloosa Television Corp., *Memorandum Opinion and Order*, 3 FCC Rcd 3656, 3658 ¶ 11 (1988), *recons. denied, Memorandum Opinion and Order*, 4 FCC Rcd 4762 (1989) (considering the impact of a proposed tower on area's migratory bird population); *see also* Letter from Linda Blair, Acting Chief, Audio Services Division, Mass Media Bureau, to Tanja L. Kozicky, Esq., 11 FCC Rcd 4163, 4166 & n.10 (Audio Serv. Div. 1996) (addressing concerns regarding effect of proposed construction on migratory birds consistent with Commission's overall obligations to consider the impact of authorized facilities on the environment); Baltimore County, Maryland, *Memorandum Opinion and Order*, 4 FCC Rcd 5068, 5071 ¶¶ 23-25 (Private Radio Bureau 1989), *review denied, Memorandum Opinion and Order*, 5 FCC Rcd 5615 (1990) (finding that proposed tower would not have a significant effect on the environment due to bird mortality).

[41] The Commission's rules provide that, for facilities that require no Commission authorization prior to construction, the licensee or applicant is to ascertain whether the proposed facility may have a significant environmental impact, and if so, must file and await Commission processing of an EA prior to construction. 47 C.F.R. § 1.1312(a), (b).

[42] *See, e.g.*, FCC Form 854 (Application for Antenna Structure Registration), Item 38; FCC Form 601 (Application for Wireless Telecommunications Bureau Radio Service Authorization), General Certification Statement 6; FCC Form 301 (Application for Construction Permit for Commercial Broadcast Station), General Environmental Worksheet; FCC Form 301-CA (Application for Authority to Make Changes in a Class A Television Broadcast (continued....)

towers or other similar structures, and quantify the results of their use. The *NOI* also sought comment specifically about the guidelines that the FWS developed, and recommended for voluntary use by companies, in an effort to minimize the impact of communications towers on migratory birds.[50] The FWS Guidelines advise, to the extent feasible: collocation of antennas on existing towers or other structures rather than new tower construction; where collocation is not feasible, construction of new towers that are no taller than 199 feet above ground level without guy wires or lighting; siting new towers within existing tower farms; and use of the minimum acceptable amount of lighting that the FAA recommends for aviation safety. The *NOI* asked whether the current state of scientific knowledge supports the use of the FWS Guidelines generally, or any specific parts of them. The *NOI* inquired whether those Guidelines or other measures to protect migratory birds might impact the delivery of communications services such as the transition to digital television and the use of radio transmitters by state and local public safety entities. The *NOI* also sought comment on whether imposing guidelines or restrictions might impact homeland security objectives.[51]

16. *Parties supporting Commission action.* FWS argues that the broad statutory language of the MBTA prohibits any unintended death of even one migratory bird caused by a collision with a communications tower.[52] With regard to the state of scientific information, FWS acknowledges that there is no standard research protocol to study mortality events at communications towers[53] and contends that only a broad cumulative impacts study would assess the whole situation.[54] FWS claims, however, there has been a recent dramatic increase in migratory bird deaths as a result of the exponential growth in communications tower construction that began in the 1990s.[55] The agency estimates that collisions with communications towers are responsible for at least 4 to 5 million bird deaths per year, and that if a proper cumulative impact study were conducted it might indicate the number to be closer to 50 million per year.[56] With regard to measures to reduce migratory bird deaths, FWS urges communications tower constructors and licensees to comply with its voluntary tower construction guidelines.[57]

17. The American Bird Conservancy, Forest Conservation Council, and Friends of the Earth filed a joint comment in which they contend that, by not taking steps to mitigate migratory bird collisions, the Commission has failed to comply with NEPA, the MBTA, and the ESA.[58] These groups argue that NEPA requires the Commission to prepare a Programmatic Environmental Impact Statement concerning the impact of communications tower collisions on migratory birds.[59] They further urge the

[50] Memorandum from Jamie Rappaport Clark, Director, U.S. Fish and Wildlife Service, U.S. Department of the Interior, to FWS Regional Directors, Subject: Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers, available at

http:// migratorybirds.fws.gov/issues/towers/comtow.html (Sept. 14, 2000) (FWS Guidelines).

[51] *Id.* at 16952-16953 ¶¶ 29-33.

[52] FWS *NOI* Comments at 1.

[53] *Id.* at 3, 5, 8.

[54] *Id.* at 3, 13.

[55] *Id.* at 2, 3, 4.

[56] *Id.* at 3, 4.

[57] *Id.* at 10.

[58] American Bird Conservancy, Forest Conservation Council, and Friends of the Earth *NOI* Comments at 1 (American Bird Conservancy *NOI* Joint Comments).

[59] *Id.* at 2.

deaths per year, FWS also estimates that there are at least 10 billion migratory birds nationwide. Using those estimates, CTIA and NAB calculate that communications towers would account for only a 0.05 percent reduction of the migratory bird population each year, and argue that is not a significant enough impact on the environment to support any requirements under NEPA.[70]

21. CTIA and NAB submitted a study prepared by Woodlot Alternatives, Inc., an environmental consulting firm, to further support their argument that existing evidence is insufficient to show that collisions with towers have a significant impact on migratory birds. The Woodlot study found, among other things, that the quality of the information in the existing studies varied widely and there did not appear to be any standard method for collecting data.[71] Woodlot notes that certain factors, such as weather, lighting, and seasonal migration patterns, are reported to be more significant than others, but "[d]ue to the incidental and biased nature of these reports it is not possible to examine specific factors that have contributed to avian mortality."[72] AT&T Wireless, Cingular, SBC, PCIA, Sprint, and NATE agree with CTIA and NAB that there is insufficient scientific evidence to support Commission action to protect migratory birds.[73]

C. The Avatar Report and Comments

22. To assist the Commission in its evaluation of the scientific studies and comments received in response to the *NOI* – as well as to identify and help the Commission assess additional studies that were available – the Commission retained Avatar, an environmental risk consulting firm, in May 2004. The Commission asked Avatar to determine if the studies were sufficient to support any conclusions about the three overarching issues raised by the *NOI*: (1) whether collisions with communications towers have an adverse impact on the viability of migratory bird species; (2) what role certain factors (*i.e.*, migration patterns, bird behavior, tower configuration, tower siting, tower lighting, and weather) have on the increasing or decreasing number of such collisions; and (3) whether certain measures might minimize the impacts of tower construction on migratory birds. Avatar submitted its findings and recommendations in September 2004.[74]

23. Avatar explained that "[a]lthough most of the causes and possible solutions for increased avian mortalities associated with communication structures remain speculative, a few conclusions have been advanced with some degree of confidence within the scientific community studying this problem."[75]

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[70] *Id.* at 14. Similarly, Sprint argues that FWS's estimate of 5 million annual migratory bird deaths due to collisions with communications towers is insignificant when compared to FWS's high-end estimated migratory bird population of 20 billion. Sprint *NOI* Comments at 3-4.

[71] CTIA and NAB *NOI* Comments, Exhibit A, Woodlot Alternatives, Inc., "An Assessment of Factors Associated with Avian Mortality at Communications Towers – A Review of Existing Scientific Literature and Incidental Observations: Technical Comments prepared in response to the August 20, 2003, Notice of Inquiry Issued by the Federal Communications Commission (FCC) WT Docket No. 03-187" (Woodlot *NOI* Technical Study) at 3, 16, 38.

[72] *Id.* at 38.

[73] AT&T Wireless *NOI* Comments at 2; Cingular and SBC *NOI* Comments at 6-7, 12; PCIA *NOI* Comments at 4-5; Sprint *NOI* Comments at 3-9; NATE *NOI* Comments at 2-6.

[74] *See generally* Notice of Inquiry Comment Review Avian/Communication Tower Collisions, Final, Prepared for Federal Communications Commission, by Avatar Environmental, LLC (filed December 10, 2004) (*Avatar Report*), WT Docket No. 03-187.

[75] *Avatar Report* at 5-1.

that might mitigate avian mortality, particularly mass mortality, at communications towers.[80] Avatar's long-term recommendations included: incorporate the results of current studies into the Commission's review of tower applications; conduct laboratory-controlled studies into avian vision; and adapt the Potential Impact Index, which FWS uses to assess the impact of the locations of wind turbines on the environment, for use with communications towers.[81]

25. In December 2004, the Wireless Telecommunications Bureau issued a Public Notice requesting comment on Avatar's findings and recommendations.[82] The comment period elicited 22 responses.[83] In these comments, FWS, bird advocates, licensees, tower owners, and constructors alike state that Avatar's findings do not change their respective initial positions in response to the *NOI* as to whether the Commission should modify its rules to minimize the impact that communications tower collisions have on migratory birds.

26. FWS agrees with many of Avatar's findings and recommendations, particularly Avatar's proposal for a comprehensive guidance document that would provide standardized research approaches, protocols, and problem-solving tools.[84] FWS also concurs with Avatar's recommendation that researchers must develop baseline information on migratory bird vision traits, densities, movements, altitudes, and behaviors during migration near tower sites.[85] FWS contends, however, that Avatar's conclusion that "biologically significant tower kills have not been demonstrated" is ambiguous and can be misinterpreted.[86] Given the existence of documented instances in which thousands of birds have been killed at one communications tower, and in the absence of meaningful study as to the impact of such incidents on migratory bird populations, FWS argues that Avatar should have been more cautious in suggesting that evidence fails to show a relationship between avian collisions with communications towers and population decline of migratory bird species.[87]

27. The American Bird Conservancy, Forest Conservation Council, Humane Society, and Defenders of Wildlife, in their joint comments on the Avatar report, attach a technical report from an environment consulting firm, Land Protection Partners (LPP), that similarly criticizes aspects of the Avatar report. LPP contends that Avatar failed to present a coherent analysis before defining the term "biological significance."[88] LPP argues that Avatar should have assessed biological significance per species. LPP presents an analysis in which it concludes that "for the ten avian species killed most frequently at towers, total annual mortality is estimated to be from 490,000 to 4.9 million birds for each species." In arriving at its estimates, LPP begins with a 2000 report, provided by the American Bird

[80] *Avatar Report* at 5-4 to 5-12.

[81] *Id.*

[82] *Avatar Public Notice*, 19 FCC Rcd 24007.

[83] See Appendix B for the complete list.

[84] FWS *Avatar PN* Comments at 1, 5.

[85] *Id.* at 4.

[86] *Id.* at 2.

[87] *Id.*

[88] American Bird Conservancy *Avatar PN* Joint Comments at Attachment, Land Protection Partners, "Scientific Basis to Establish Policy Regulating Communications Towers to Protect Migratory Birds: Response to Avatar Environmental, LLC, Report Regarding Migratory Bird Collisions with Communications Towers, WT Docket No. 03-187, Federal Communications Commission Notice of Inquiry" (LPP *Avatar PN* Technical Report).

in the LPP report involved towers over 600 feet AGL, it is inappropriate for LPP to extrapolate from this data set to predict the effects that shorter towers might have on migratory birds.[96]

29. In its reply comments, Centerpointe argues that an important piece of information missing from the LPP report is population trend data. According to Centerpointe, the USGS North American Breeding Survey Trend Results show that several of the migratory bird species that LPP mentioned in its report (*e.g.*, fifteen species of Warblers including the Kirtland Warbler, nine species of Vireos, Ovenbird, and Common Ground Dove) have increased in population between 1982 and 2002.[97]

D. Studies at Michigan Public Safety Communications System (MPSCS) Towers

30. Dr. Joelle Gehring also filed comments in response to Avatar's report.[98] Since 2003, Gehring has been the principal investigator examining migratory bird collisions at several towers operated by MPSCS.[99] The studies are intended to assess whether differences in certain features of communications towers result in differences in avian mortality. The MPSCS studies rely on manual searches of the area near communications towers, during migration seasons, for migratory bird carcasses. Gehring designed the studies to include specific protocols for conducting the searches as well as protocols to account for searching biases and predator biases that might lead to errors in counting dead birds.[100] Gehring's comments on the Avatar report include interim results of the Fall 2003 and 2004 studies. Those studies were designed to specifically assess whether differences in the degree of avian mortality could be attributed to the use or non-use of guy wires. The studies included three guyed towers and three unguyed towers within the height range of 380 to 480 feet AGL. According to Gehring's interim report of the 2003 and 2004 studies, a total of 194 migratory bird carcasses were found at the guyed towers during the three study seasons, compared to 14 at the unguyed towers.[101]

31. Subsequent to filing comments in response to the Avatar report, Gehring released interim results of MPSCS studies conducted during the Spring 2005 and Fall 2005 migration seasons. Gehring designed the 2005 studies to assess whether differences in tower lighting systems and tower height correlated to differences in avian mortality, as well as to continue to assess the effect that guy wires may have on avian mortality.[102] For these seasons, Gehring studied 12 guyed and 9 unguyed towers between

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[96] *Id.* at 2, 8-10.

[97] Centerpointe *Avatar PN* Reply Comments at 17.

[98] Gehring *Avatar PN* Comments at 1.

[99] MPSCS retained Gehring to design and conduct studies of avian mortality at certain of its towers over several migration seasons. The study design and field work were completed according to the Avian Collision Study Plan for the Michigan Public Safety Communications System (MPSCS): Assessing the Role of Lighting, Height, and Guy Wires in Avian Mortality Associated with Wireless Communications and Broadcast Towers (revised version: April 27, 2004).

[100] *Id.* at 2.

[101] *Id.* at 3-5. During the Fall 2003 study, Gehring's staff found 22 migratory bird carcasses next to guyed towers and no migratory bird carcasses at the unguyed towers. In the Spring 2004 study, Gehring's staff found 121 migratory bird carcasses at guyed towers and 5 migratory bird carcasses at unguyed towers. During the Fall 2004 study, her staff found 51 migratory bird carcasses at guyed towers and nine migratory bird carcasses at unguyed towers. *Id.*

[102] Gehring, Joelle, Ph.D., *Avian Collision Study for the Michigan Public Safety Communications System (MPSCS): Summary of Spring 2005 Field Season* (Aug. 12, 2005) at 1 (Gehring August 2005 Report); Gehring, (continued....)

any additional requirements based on other characteristics of communications facilities, including the use of guy wires, tower height, the location of the tower, and the possibility of collocation. Finally, we request comment on whether to add an additional criterion for requiring an EA to Section 1.1307(a) of our rules.

A. Legal Framework

33. As discussed above, NEPA requires federal agencies to analyze the impact of their proposed major federal actions on the quality of the human environment.[106] CEQ's regulations define the "human environment" to include the natural and physical environment and the relationship of people with that environment.[107] The ESA requires federal agencies to "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species . . . determined . . . to be critical. . . ."[108] Some, but not all, species of migratory birds are protected under the ESA. In adopting its environmental rules, the Commission in accordance with its public interest responsibilities under the Communications Act,[109] previously has determined that construction of communications towers requires compliance with environmental responsibilities under NEPA and the ESA.[110] Moreover, although under our present rules we do not routinely require environmental processing with respect to migratory birds, the Commission has considered the impact of individual proposed actions on migratory birds as part of its overall responsibility under NEPA.[111] In

(Continued from previous page)
requirements set forth in the Peer Review Bulletin issued by the Office of Management and Budget (OMB). *See generally* OMB Final Information Quality Bulletin for Peer Review, 70 Fed. Reg. 2664 (Jan. 14, 2005).

[106] 42 U.S.C. § 4332(2)(C).

[107] 40 C.F.R. § 1508.14.

[108] 16 U.S.C. § 1536(a)(2). The ESA further declares "the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this chapter." 16 U.S.C. § 1531(c)(1).

[109] Amendment of Environmental Rules in Response to New Regulations Issued by the Council on Environmental Quality, FCC 85-626, *Report and Order*, 60 RR 2d 13, 16 (1986) ("The primary purpose of this [NEPA] process is to ensure that agencies consider and balance with other public interest factors the environmental effects of proposals before them."). *See also* Amendment of Environmental Rules, *First Report and Order*, 5 FCC Rcd 2942, 2943 (1990) ("any delay in construction that results from requiring an applicant to undergo environmental processing prior to construction, rather than at the licensing stage, is more than offset by the public interest benefits of ensuring, in compliance with Federal environmental statutes, that no potentially irreversible harm to the environment occurs.").

[110] *See, e.g.*, Amendment of Environmental Rules, *First Report and Order*, 5 FCC Rcd 2942 ¶ 1 (1990) (requiring licensees and applicants to ascertain prior to construction whether certain proposed facilities may have a significant environmental effect under the Commission's NEPA rules); *Antenna Structure Procedure Order*, 11 FCC Rcd at 4289 ¶ 41 (registration of an antenna structure constitutes a "federal action" justifying imposition of environmental responsibilities on the structure owner); *cf.* Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, *Report and Order*, 20 FCC Rcd 1073, 1083-84 ¶¶ 24-28 (tower construction is permissibly viewed as a "federal undertaking" under the National Historic Preservation Act (NHPA)); *petition for review denied, CTIA v. FCC*, Case No. 05-1008, ___ F.3d ___, 2006 WL 2728749 (D.C. Cir. September 26, 2006) (upholding the applicability of the NHPA to tower construction).

[111] *See* County of Leelanau, Michigan, *Memorandum Opinion and Order*, 9 FCC Rcd 6901, 6903 ¶ 8 & n.11 (1994) (addressing whether proposed tower would have a significant, adverse impact on migratory bird population as part of overall obligations to consider the impact of authorized facilities on the environment); Caloosa (continued....)

clear" whether the MBTA applies to the Commission's actions.[120] Nonetheless, some commenters argue that under the MBTA, a party may be liable for any unintentional, incidental death of a migratory bird, such as through a collision with a communications tower.[121] Others contend that the MBTA has a narrower purpose to prohibit only intentional kills of migratory birds, such as by hunting or through a program to control migratory bird population.[122] We seek comment on the nature and scope of the Commission's responsibilities, if any, under this statute. We also seek comment on whether the MBTA gives the Commission (or any agency other than the Department of the Interior) any authority to promulgate regulations to enforce its terms.[123] If the Commission has statutory authority to issue regulations to enforce the MBTA, how could the Commission draft such regulations in a manner that does not impede our responsibility under the Communications Act to ensure the construction of communications towers that are necessary to meet the communications service needs of our nation?[124] We seek comment on these questions.

B. Possible Need for Commission Action

36. In the *NOI*, the Commission sought comments supported by evidence concerning whether communications towers have any significant impact on migratory birds. In response, the Commission received a myriad of comments reflecting widely divergent views as to the degree to which communications towers cause migratory bird mortality. FWS estimates that the number of migratory birds killed by communications towers could range from 4 to 50 million per year.[125] In light of these widely divergent views, we seek further comment supported by evidence regarding the number of migratory birds killed annually by communications towers. Where possible, commenters are encouraged to support their estimates with scientifically reviewed studies.

37. Understanding the scope of any problem involving communications towers and migratory birds is essential to devising meaningful solutions consistent with our responsibilities under the Communications Act and other federal statutes. In particular, we seek comment on whether the evidence concerning the impact of communications towers on migratory bird mortality adduced in response to the questions posed in paragraph 36 is sufficient to justify and/or authorize Commission

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[120] Petition by Forest Conservation Council, American Bird Conservancy and Friends of the Earth for National Environmental Policy Act Compliance, *Memorandum Opinion and Order*, 21 FCC Rcd 4462, 4469 n.42 (2006); County of Leelanau, Michigan, *Memorandum Opinion and Order*, 9 FCC Rcd 6901, 6903 ¶ 8 (1994).

[121] FWS *NOI* Comments at 1, 5; American Bird Conservancy *NOI* Joint Comments at 1; *see U.S. v. Moon Lake Electric Assoc.*, 45 F. Supp. 2d 1070 (D. Colo. 1999) (rejecting electric power cooperative's motion to dismiss criminal prosecution for unintentional electrocution of birds and holding that the "MBTA's language and regulations suggest that Congress intended to prohibit conduct beyond that normally exhibited by hunters and poachers").

[122] CTIA *NOI* Comments at 23-24; *see City of Sausalito v. O'Neill*, 386 F.3d 1186, 1225 (9th Cir. 2004), quoting *Seattle Audubon Society v. Evans*, 952 F.2d 279, 302 (9th Cir. 1991) (explaining that an unlawful "taking" under the MBTA "describes physical conduct of the sort engaged in by hunters and poachers").

[123] *See* CTIA *NOI* Comments at 24 (arguing that the Commission does not have statutory authority to regulate towers for the purpose of minimizing their potential impacts on migratory birds).

[124] Section 1 of the Communications Act states that the purpose of the Commission is, among other things, "to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service." 47 U.S.C. § 151.

[125] FWS *NOI* Comments at 3.

hazard to air navigation.[130] Part 17 of the Commission's rules sets forth procedures for implementing this authority.[131] Specifically, if a proposed construction or modification of a communications tower would be more than 60.96 meters (200 feet) in height above ground level (AGL), or meet certain other conditions detailed in Section 17.7 of our rules (such as proximity to an airport),[132] our rules (as well as the FAA's rules) require the entity proposing such construction or modification to notify the FAA.[133] If the FAA determines, in accordance with its applicable Advisory Circular(s), that the construction or alteration is one for which lighting or marking is necessary for aircraft navigation safety, the FAA sends an acknowledgement to the antenna structure owner that contains a statement to that effect and information on how the structure should be marked and lighted.[134] This acknowledgment is the FAA's determination of "no hazard," meaning that the FAA has determined that the structure will pose no hazard to aircraft so long as it is marked and/or lighted in accordance with the FAA's specifications. The antenna structure owner must register the structure with the Commission prior to construction by submitting FCC Form 854 together with the FAA's "no hazard" determination.[135] Unless the Commission specifies otherwise, the FAA's specifications for marking and/or lighting on the antenna structure are then made part of the owner's FCC antenna structure registration, and the owner is required to maintain the marking and/or lighting in accordance with those specifications.[136] The FAA's current standards pertaining to tower lighting specifications to promote aviation safety are set forth in Advisory Circular 70/7460-1K ("Obstruction Marking and Lighting").[137] The FAA's recommendations can vary depending on characteristics of the tower, terrain, and location, and may permit antenna structure owners to choose among different types of lighting systems, including red steady (red solid state), red strobe interspersed with red steady, or white lights.[138]

41. In April 2004, in response to a request by the American Bird Conservancy to minimize mortality to migratory birds, the FAA issued an internal memorandum providing guidance on the FAA's issuance of lighting recommendations set forth in Advisory Circular 70/7460-1K.[139] Specifically, as interim guidance, the FAA's Program Director for Air Traffic Airspace Management directs Regional Air Traffic Division Managers that use of medium intensity white strobe lights for nighttime conspicuity is to be considered the preferred system over red obstruction lighting systems when feasible and to the maximum extent possible in cases in which aviation safety would not be compromised.[140] The

[130] 47 U.S.C. § 303(q).

[131] 47 C.F.R. Part 17.

[132] 47 C.F.R. § 17.7.

[133] 14 C.F.R. § 77.13.

[134] 14 C.F.R. § 77.19. *See* FAA Advisory Circular (AC) 70/7460-1K, "Obstruction Marking and Lighting" (August 2000), and FAA Advisory Circular (AC) 150/5345-43E, "Specification for Obstruction Lighting Equipment" (October 1995).

[135] 47 C.F.R. § 17.4(b).

[136] 47 C.F.R. § 17.23.

[137] FAA AC 70/7460-1K, "Obstruction Marking and Lighting."

[138] *Id.* at 13-27.

[139] *See* April 6, 2004 Memorandum from the FAA's Program Director for Air Traffic Airspace Management, ATA-1, Sabra W. Kaulia, to Regional Air Traffic Division Managers ("2004 FAA Memorandum").

[140] *Id.* These different white and red lighting systems are discussed in more detail in the FAA AC 70/7460-1K. *See* FAA AC 70/7460-1K. We note that Advisory Circular 70/7460-1K currently does not permit the use of red (continued....)

determine to adopt additional lighting guidance in our rules, revisions to other provisions of Part 17 or elsewhere in our rules are necessary. We encourage commenters to suggest specific language and discuss its benefits and drawbacks.

44. In addition, we invite commenters to consider the possible use and benefits of lighting systems other than red steady and medium intensity white strobe. We note that the FAA Advisory Circular pertaining to tower lighting does not currently permit the use of red strobe or red blinking incandescent lights without the use of red steady lights.[145] The American Bird Conservancy, however, has recently argued that recent and past research, including the preliminary results from the Michigan study, suggests that "the critical element in lighting towers and other structures is to use strobe lighting for night time conspicuity exclusively, and not to use red steady burning lights."[146] Thus, noting that the FAA does not recommend the use of white strobe lights under some circumstances, the American Bird Conservancy now asserts that either white or red strobe lighting is desirable.[147] We seek comment on the significance of the existing research, and whether, given the FAA's existing Advisory Circular, we should modify our proposed rule to account for the possible use of red strobe lights or red blinking lights without red steady lights. If the final results of the Michigan study are consistent with the preliminary results and are borne out by a final report, would the results provide sufficient scientific basis on which to conclude that use of red strobe or red blinking lights might reduce bird mortality levels to the same or similar degree as white strobe lights? We also seek comment on whether there are other studies that have been designed to assess the different effects on avian mortality of these different lighting systems and whether there is a need for any further studies. If other studies exist, what are their results? Do they support the adoption of our tentative conclusion regarding the use of white strobe lights? Or, would the studies support giving tower registrants the option of using red strobe or red blinking incandescent lights as an alternative to white strobe lights, to the extent consistent with aircraft navigation safety and endorsed by the FAA?

45. We also seek comment regarding the economic, environmental, and any other costs of a requirement to use white strobe lights when compared with other lighting alternatives. In particular, what would be the specific economic impact on licensees and tower owners and constructors, including small businesses, of adopting such a requirement? What are the comparative costs and longevity of white strobe lighting systems versus the other lighting systems identified in this section? What other factors are relevant to assess the impact that requiring medium intensity white strobe lighting would have on licensees and towers owners and constructors? To the extent white strobe lighting would increase the cost of constructing or maintaining towers, we further seek comment on the effect this would have on communications service deployment, homeland security, and public safety.

46. We also note that Section 1.1307(a)(8) provides that construction of antenna towers and/or supporting structures that are to be equipped with high intensity white lights, which are to be located in residential neighborhoods, is an action that may significantly affect the environment and thus requires the preparation of an EA by the applicant.[148] Further, the April 2004 FAA memorandum notes

[145] FAA AC 70/7460-1K at 13-14. We further note that FAA AC 70/7460-1K does not appear to explicitly permit the use of red blinking incandescent lights. *Id.*

[146] E-mail from Gerald W. Winegrad, American Bird Conservancy, to Fred Campbell, Legal Advisor to FCC Chairman Martin, dated July 31, 2006.

[147] *See id.*

[148] 47 C.F.R. § 1.1307(a)(8).

can be shown that guy wires do increase the number of migratory bird collisions with communications towers, is the increase in the number of collisions also related to the type of lighting used, such that the number of collisions would be mitigated if we were to adopt our tentative conclusion that medium intensity white strobe lights for nighttime conspicuity is to be considered the preferred lighting system over red obstruction lighting systems?

51. We also request information on engineering and economic factors relevant to the use of guy wires. Is there a height threshold above which guy wires are generally necessary, and if so, what is that height? Does the calculus vary depending on soil conditions or other factors? To what extent are towers utilizing guy wires necessary to the provision of various licensed services, and what economic factors may affect the decision whether to use guy wires?

52. We also request comment on any additional consequences that may result from regulation relating to guy wires. For instance, if we were to limit the use of guy wires, what would be the impact on tower construction and the deployment of communications services generally? Would tower constructors need to erect towers of the same height but with a larger physical footprint, a greater number of shorter towers to provide equivalent service, or some combination thereof? To what extent would either non-guyed tower designs or greater proliferation of towers result in creating additional adverse impact on environmental matters that do not pertain to migratory birds, such as historic properties, wetlands, or endangered species?

53. We ask commenters to address how we might balance these various scientific, engineering, economic, and other factors, in determining what, if any, standards should govern the use of guy wires. We encourage commenters to suggest specific tests for when the use of guy wires may be suspect, and to justify those tests based on objective evidence. Commenters should also address how any standards should be implemented. For example, if we adopt standards regarding the use of guy wires, should we mandate that all towers, or all towers meeting certain criteria, meet those standards without exception? Alternatively, should we permit towers with guy wires upon filing of an EA and issuance of a FONSI, or upon certification that no reasonable alternative (e.g., use of non-guyed towers or collocation) was available?[154] We seek comment regarding both the benefits and the costs of these and alternative regimes.

54. We specifically seek comment on whether to adopt requirements relating to marking of guy wires. Avatar reported that one of the "most effective ways to reduce avian mortality is to mark [wires] to make them more visible,"[155] and that the effectiveness of methods that mark overhead electric power lines and target certain species of birds is well documented.[156] Therefore, Avatar concluded that wire marking "may increase guy wire visibility thereby reducing the collision risk for some birds,"[157] and discussed several currently available devices such as bird flight diverters.[158] Avatar also explained, however, that "from an engineering perspective," wire marking is not "always a good solution" because devices "that physically enlarge the wire commonly act as wind-catching objects and may increase the

[154] *See* paras. 53-57, *infra*.

[155] *Avatar Report* at 4-8.

[156] *Id.* at 4-8 to 4-9.

[157] *Id.* at 4-9.

[158] *Id.* at 4-9 to 4-16.

EA.

4. Tower Location

59. We seek comment on whether towers located in certain areas might cause a sufficient environmental impact on migratory birds such that, when considered with other relevant factors, some Commission action might be justified. In the *NOI*, the Commission requested scientific research and other data "concerning the impact on migratory birds of communications towers located in or near specific habitats, such as wetlands."[164] The *NOI* asked whether "towers on ridges, mountains, or other high ground have a differential impact on migratory bird populations." The *NOI* also sought comment on the impact on migratory birds of towers located in areas with a high incidence of fog, low clouds, or similar obscuration, or in proximity to coastlines and major bird corridors.[165] In response to the *NOI*, some commenters presented arguments and rationales why communications towers should not be sited in certain locations such as migratory bird habitats or in migration corridors on ridgelines.[166] Although Avatar noted some degree of confidence within the scientific community that the "greatest bird mortality tends to occur on nights with low visibility conditions, especially fog, low cloud ceiling, or other overcast conditions," it reached no similar findings with regard to the effect that locating towers on ridges, or in wetlands, might have on avian mortality.[167] In addition, Land Protection Partners discussed a "multi-modal research study in New Hampshire" that it claimed "revealed the effect of topography of the Appalachian Mountains on migratory birds, including neo-tropical migrants."[168] We seek information on whether there are additional scientific studies that have examined the effect that locating communications towers in different areas, with different weather conditions, might have on avian mortality and, if so, what if any requirements we should adopt on the basis of such studies.

5. Collocation

60. We request comment on whether the Commission should adopt additional requirements to promote collocation.[169] We note that FWS, American Bird Conservancy, and several other commenters argue that the Commission should strongly encourage license applicants to collocate their antennas on existing structures to the extent possible.[170] We seek comment and information relevant to whether we should adopt policies that would promote more extensive use of collocation. If we do adopt regulations to promote collocation, we seek comment on what form those regulations should take. Possibilities could include, for example, a requirement to certify that collocation opportunities are

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[164] *NOI*, 18 FCC Rcd at 16950 ¶ 23.

[165] *Id.*

[166] *See, e.g.*, American Bird Conservancy *NOI* Joint Comments at 17; American Bird Conservancy *Avatar PN* Joint Comments at 2.

[167] *Avatar Report* at 5-1.

[168] LPP *Avatar PN* Technical Report at 28. According to Land Protection Partners, researchers in this study observed "exceptional numbers of migrants" at 2 to 30 meters AGL on ridgelines.

[169] We note that the Commission's rules currently address collocation matters in certain respects. *See, e.g.*, 47 C.F.R. § 1.1306 Note 1 (excluding collocations from provisions of Section 1.1307(a) other than Section 1.1307(a)(4); 47 C.F.R. Part 1, App. B (Nationwide Programmatic Agreement excluding most collocations from review under Section 106 of the National Historic Preservation Act).

[170] American Bird Conservancy *NOI* Joint Comments at 17; FWS *NOI* Comments at 10. *See also* FWS Voluntary Guidelines at 2.

to affect migratory birds. Another possibility could be to require an EA if a proposed construction "might affect migratory birds." Commenters discussing this approach should address how such a broadly worded requirement might be administered, and how it could be enforced.

64. An alternative to these general approaches may be to require an EA only for proposed towers that exhibit certain characteristics that render them more likely to harm migratory birds. For example, as suggested in the discussion above, we might require an EA only for towers that use certain lighting systems, or that require guy wires, or that exceed a specified height.[175] We seek comment as to whether the evidence supports such criteria, and if so where the thresholds should be set. Are there any additional factors that should be considered in triggering an EA requirement, such as the area of the country in which the tower would be located, the local topography, or prevailing weather conditions? We encourage commenters to set forth specific proposals and to address all relevant considerations, including the scientific support for particular criteria; the effect of any such EA requirement on the deployment of wireless services, on homeland security, and on public safety; and the Commission's ability to administer any particular proposal if adopted. Commenters should also address both the effectiveness and the burdens of various approaches, including the impacts on small businesses.

7. Other Possible Actions.

65. Finally, we seek comment on whether there are other possible substantive or procedural measures the Commission could take to minimize migratory bird collisions that are not discussed above. For any such possible measure, we request any available information and scientific research to support the effectiveness of such a measure at minimizing migratory bird collisions. We also request comment on the best way to implement such a measure so as to eliminate the imposition of any unnecessary costs on affected entities, including small businesses.

IV. PROCEDURAL MATTERS

A. *Ex Parte* Rules – Permit-But-Disclose Proceeding

66. This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed pursuant to the Commission's Rules.[176]

B. Initial Regulatory Flexibility Act Analysis

67. As required by the Regulatory Flexibility Act,[177] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this document. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this *Notice of Proposed Rulemaking* as set forth below in subsection D, and have a separate and distinct heading designating them as responses to the IRFA.

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[175] *See* paras. 36-44, *supra.*

[176] *See generally* 47 C.F.R. §§ 1.1202, 1.1203, 1.1206. We note that the Commission shares jurisdiction over some of the issues addressed in this proceeding with FWS and the FAA, and that presentations by these agencies are therefore exempt from disclosure. 47 C.F.R. § 1.204(a)(5).

[177] *See* 5 U.S.C. § 603.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

E. Further Information

70. For further information concerning this rulemaking proceeding contact: Louis Peraertz, (202) 418-1879, louis.peraertz@fcc.gov, or Aaron Goldschmidt at (202) 418-7146, aaron.goldschmidt@fcc.gov, Wireless Telecommunications Bureau, Spectrum and Competition Policy Division.

V. ORDERING CLAUSES

71. Accordingly, IT IS ORDERED that, pursuant to Sections 1, 4(i), 303(q), 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 303(q), 303(r), and the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq., this *Notice of Proposed Rulemaking* IS HEREBY ADOPTED.

72. IT IS FURTHER ORDERED that pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on the *Notice of Proposed Rulemaking* on or before [60 days after publication in the Federal Register] and reply comments on or before [90 days after publication in the Federal Register].

73. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rulemaking*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

INITIAL REGULATORY FLEXIBILITY ACT ANALYSIS

As required by the Regulatory Flexibility Act (RFA),[179] the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this *Notice of Proposed Rule Making (NPRM)*. Written public comments are requested regarding this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *NPRM* provided in paragraph 69. The Commission will send a copy of this *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[180] In addition, this *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register.[181]

A. Need for, and Objectives of, the Proposed Rules:

The National Environmental Policy Act of 1969 (NEPA) requires federal agencies to establish procedures that will enable them to analyze any potential environmental impact of actions that they undertake or authorize.[182] The Endangered Species Act (ESA) prohibits the taking of any endangered or threatened species by any person unless authorized by the U.S. Fish & Wildlife Service (FWS).[183] The Commission has implemented regulations to comply with NEPA and ESA in Part 1, Subpart I of its rules.[184] In response to the Commission's August 2003 Notice of Inquiry in this proceeding,[185] FWS and several other parties filed comments in which they argued that the Migratory Bird Treaty Act (MBTA)[186] would prohibit the unintentional and incidental take of even one migratory bird that died by colliding with a communications tower. These commenters also asserted that there have been several reports of mass migratory bird mortalities at communications towers. FWS estimates that the number of migratory birds killed each year due to collisions with communications towers could range from 4 to 50 million.[187]

In this *Notice of Proposed Rulemaking* (*NPRM*), we seek comment on whether to amend the

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[179] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[180] *See* 5 U.S.C. § 603(a).

[181] *See id.*

[182] 42 U.S.C. §§ 4321-4335; *Public Citizen*, 541 U.S. at 756; *Methow Valley Citizens Council*, 490 U.S. at 350.

[183] 16 U.S.C. § 1538(a)(1)(B). Under the ESA, "take" means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Id.* § 1532(19). The ESA authorizes the Secretary of the Interior to permit any otherwise prohibited "taking" if "such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." *Id.* § 1539(a)(1)(B).

[184] 47 C.F.R. § 1.1301 *et seq*; Amendment of Environmental Rules in Response to New Regulations Issued by the Council on Environmental Quality, *Report and Order*, 60 R.R. 2d 13 (1986).

[185] In the Matter of Effects of Communications Towers on Migratory Birds, *Notice of Inquiry*, WT Docket No. 03-187, 18 FCC Rcd 16938 ¶ 1 (2003) (*NOI*).

[186] 16 U.S.C. § 701.

[187] CTIA *NOI* Comments at Exhibit B (U.S. Fish & Wildlife Service, Migratory Bird Mortality: Many Human Caused Threats Afflict our Bird Populations, at 1 (Jan. 2002)).

million small organizations.[195] The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[196] Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.[197] We estimate that, of this total, 84,377 entities were "small governmental jurisdictions."[198] Thus, we estimate that most governmental jurisdictions are small. The changes and additions to the Commission's rules adopted in the *NPRM* are of general applicability to all FCC licensed entities of any size that use a communications tower. Accordingly, this *NPRM* provides a general analysis of the impact of the proposals on small businesses rather than a service by service analysis.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements:

The *NPRM* solicits comment on one tentative conclusion and on five other potential areas of modification to the Commission's regulations regarding the siting and construction of communications towers so as to reduce the incidence of migratory bird collisions. The *NPRM* seeks comment on its tentative conclusion that, under the Commission's Part 17 rules, the use of medium intensity white strobe lights for nighttime conspicuity is to be considered the preferred lighting system over red obstruction lighting systems to the maximum extent possible without compromising aircraft navigation safety. The *NPRM* also requests comment on whether we should impose regulations relating to the use of guy wires on communications towers, the height of communications towers, the location of communications towers, and collocation of new antennas on existing structures. Finally, the *NPRM* seeks comment as to whether the Commission should amend Section 1.1307(a) of our rules to expand the circumstances under which an EA is required. Depending on the rules that are adopted, it is possible that compliance may involve new recordkeeping or reporting requirements.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered:

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[199]

The *NPRM* seeks comment on its tentative conclusion that, under the Commission's Part 17 rules, the use of medium intensity white strobe lights for nighttime conspicuity is to be considered the

[195] Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

[196] 5 U.S.C. § 601(5).

[197] U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, page 272, Table 415.

[198] We assume that the villages, school districts, and special districts are small, and total 48,558. *See* U.S. Census Bureau, Statistical Abstract of the United States: 2006, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

[199] 5 U.S.C. § 603(c).

APPENDIX B

LIST OF COMMENTERS

This is a list of parties who filed substantial comments and reply comments within the designated comment periods in the proceeding. As discussed in footnote 2 of this Notice of Proposed Rulemaking, this list does not include more than three thousand concerned citizens, most of whom are members of the National Audubon Society, who filed brief comments both during and after the formal comment periods asking the Commission to: comply with federal environmental statutes; immediately implement the U.S. Fish and Wildlife Service voluntary guidelines; and undertake extensive research into the impact that communications towers have on migratory birds.

Responses to Migratory Bird NOI – Comments

American Bird Conservancy, Friends of the Earth, and Forest Conservation Council
American Petroleum Institute
Association of Public-Safety Communications Officials International, Inc.
AT&T Wireless Services
Albert Caccese, Audubon New York
Cellular Telecommunications & Internet Association (CTIA) and National Association of Broadcasters (NAB)
Chickasaw Nation
Cingular Wireless, LLC (Cingular) and SBC Communications, Inc. (SBC)
Delmarva Ornithological Society
Eastern Band of Cherokee Indians Tribal Historic Preservation Office
William R. Evans
Kenaitze Indian Tribe
Daniel McGowan
National Association of Tower Erectors (NATE)
National Audubon Society
National Wildlife Federation
Nikilaus E. Leggett
Nunakauyak Traditional Council
Personal Communications Industry Association (PCIA)
B. Sachau
Don Schellhardt, Esq.
Sprint Corporation (Sprint)
U.S. Fish and Wildlife Service (FWS)
Washington State Association of Broadcasters

Responses to Migratory Bird NOI – Reply Comments

Cingular and SBC
CTIA
NAB
National Association for Amateur Radio
PCIA
United States Cellular Corporation (U.S. Cellular)

STATEMENT OF COMMISSIONER MICHAEL J. COPPS

RE: Effects of Communications Towers on Migratory Birds, WT Docket No. 03-187.

Today the Commission makes good on its promise to open a rulemaking on reducing bird deaths caused by collisions with communications towers. The Chairman told us earlier this year he would bring such an item to us and I commend him for following through. There is simply no question that bird-tower collisions are a serious problem. The U.S. Fish and Wildlife Service tells us that millions of birds, perhaps as many as 50 million, die each year through such accidents. That is a sobering conclusion coming from the federal agency with the greatest scientific expertise when it comes to wildlife conservation and primary responsibility for protecting migratory birds. The situation imposes a grave responsibility on ***this*** agency, too, because of our important jurisdiction over tower painting and illumination – a responsibility to make sure that our rules and practices do not contribute to a needless toll of bird deaths.

The Commission could have faced up to this problem years ago. Put bluntly, for too many years this agency treated a widely-recognized problem with not-so-benign neglect. Now we have learned, I hope, that this is not a problem that will just go away if we ignore it. Instead, we need to face up to the hard questions and resolve them in a timely and effective fashion.

We are not faced here with an all-or-nothing choice. Communications towers are essential to modern American life, we all understand that. Without them, we could not watch television, listen to the radio, make cell phone calls, or enjoy the next generation of wireless broadband services. But even as the Commission fulfills its mission to facilitate all these exciting and important technologies, we must also be mindful of the effects we have on the nation's fragile ecosystem. The industries we oversee are backbone industries with effects felt far and wide, including on our environment. We need to be proactive on ecological preservation, instead of being perceived, as we are by some, as anti-environment or, at best, as some kind of "reluctant environmentalist" dragged kicking and screaming into the Twenty-first century. This kind of agency involvement is something I have pushed for since I arrived here at the Commission in 2001. So I am pleased we are moving in that direction. And I believe that through hard work and a willingness to learn from both conservationists and tower operators, we will find ways to continue encouraging communications technologies while at the same time minimizing ecosystem costs, such as the high avian death toll we have been witnessing. I believe our tentative conclusion about lighting systems represents a good first step in that direction, and I look forward to working with my colleagues to bring this rulemaking to conclusion in the weeks and months – hopefully not years – ahead. Thanks to my colleagues, and to the Bureau, for their good work in developing this item.

STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

RE: Effects of Communications Towers on Migratory Birds, WT Docket No. 03-187.

I am pleased to support this Notice of Proposed Rulemaking because it provides a thorough and thoughtful review into the potential effects of communications towers on migratory birds. In addition, the Notice specifically responds to my request earlier this year, during our consideration of the "gulf coast" petition, to reengage the larger migratory bird proceeding. This important proceeding unfortunately had languished for some time, and I am pleased to be able to push that review forward now.

The item before us represents a balanced look on a challenging issue. Migratory birds are a prized natural resource. Conservation of the migratory bird population and their habitats for future generations is an important goal for our society. At the same time, communication towers represent a critical component in the continued deployment of basic and advanced telecommunications services throughout the country. Towers not only will form the backbone of the transition to digital television, they also are used everyday by our nation's public safety community to effectively and timely respond to those who need our help the most. So I am pleased that our Notice asks tough questions and equally explores both sides of the issue so that we may best develop a strategic approach for dealing with the impact that communication towers have on migratory birds.

While I generally support the Notice, I did want to highlight one aspect of the item that gives me pause. The Notice suggests that there may be an open question about our legal authority under the National Environmental Policy Act (NEPA) and the Communications Act to make the requisite public interest determination to support rules specifically for the protection of migratory birds. I, for one, am confident in our legal authority under the NEPA and the Communications Act to take action, if appropriate, and do not think our conclusion on this issue should be a tentative one. I took a similarly firm position on the legal effect of the National Historic Preservation Act in our consideration of the Nationwide Programmatic Agreement – a determination that was recently upheld in the U.S. Court of Appeals for the D.C. Circuit.

Finally, I understand that there is a renewed effort by members of the communications industry along with leading environmental and conservation groups to discuss what can collectively be done to minimize the impact of communications towers on migratory birds. I am very encouraged by this news and want to extend my strong support for this cooperative effort. I hope that this group will function as an important incubator to develop and hatch consensus positions that will equally serve conservation and communications objectives going forward.

STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL

RE: Effects of Communications Towers on Migratory Birds, WT Docket No. 03-187.

Having grown up in what was a rural setting in Virginia, I have had a longstanding commitment to ecological conservation, and ornithological conservation in particular. Accordingly, I am pleased that the Commission is furthering its previous efforts to gather scientific evidence on avian mortality at communications towers.

Many thanks to Chairman Martin for his leadership in bringing this issue before the Commission today. I encourage all interested parties to participate in this rulemaking. I look forward to working closely with my colleagues and all stakeholders to ensure that the Commission moves forward to carefully balance the need to protect against avian mortalities associated with communications towers, while not unduly hampering the ability of industry to deliver new, advanced services to American consumers as quickly and economically as possible.