Federal Communications Commission
Washington, D.C. 20554

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Opportunities to Reduce Bird Collisions with Communications Towers While Reducing Tower Lighting Costs

As of May 2012, the Federal Aviation Administration (FAA) permits a type of tower lighting that reduces construction and maintenance costs to tower owners while simultaneously reducing migratory bird collisions by as much as 70%. Implementing this type of tower lighting can be achieved through a simple application process with the FAA and the Federal Communications Commission (FCC).

The FAA and FCC recognize that:

- Birds are attracted to non-flashing red lights, such as L-810 side-marker lights; and
- Birds are much less attracted to flashing lights on towers, such as L-864 and L-865 lights.

The FAA has determined that extinguishing the L-810, non-flashing lights on towers taller than 350 ft. Above Ground Level (AGL) but maintaining the flashing lights is safe for aviation. *See* http://www.airporttech.tc.faa.gov/safety/downloads/TC-TN12-9.pdf.

A "lighting deviation" is required to implement this type of lighting. Typically the FAA quickly approves requests, especially if the tower already has an approved lighting system. Alternatively, the traditional tower lighting styles that use white flashing lights at night (Styles B, C, and D) achieve bird-friendly benefits similar to the FAA lighting deviation.

Per the FAA requirements, flashing red lights should flash at 30 FPM (+/- 3 FPM), a rate easily programmable in LED systems.

To extinguish or eliminate the L-810 tower lights/side-markers on an existing registered tower, or to request use of flashing red lights only on a proposed new tower, you must take the following steps:

1. File a Marking and Lighting study electronically with the FAA (https://oeaaa.faa.gov/oeaaa/external/portal.jsp) requesting the elimination or omission of steady-burning lights (L-810) with Form 7460-1, Notice of Proposed Construction or Alteration. Designate structure type: "Deviation from Red Obstruction Light Standards".

2. Once the FAA has approved the request and assigned a FAA Study Number, submit an online eSupport request (https://esupport.fcc.gov/request.htm) asking the FCC to verify that our records of this FAA Study Number reflect the FAA-approved bird lighting deviation.

3. After receiving a confirmation FCC record that the FAA study has been updated, file Form 854 with the FCC via the Antenna Registration System (ASR). For an existing registered tower, please select "MD – Modification" and update the Lighting to "Option 3 – Other" and provide a description (Ex: Style E w/ Red Light Deviation). The FCC will typically approve the application and modify the registration within 24 hours. For a proposed new tower enter the Lighting as "Option 3 – Other," and provide a description. FCC approval for a proposed tower is subject to the procedures and time periods described at http://www.fcc.gov/help/environmental-notification-process-registration-antenna-structures-overview.

4. Once the lighting change for an existing tower has been granted by the FCC via ASR, the steady-burning, side-marker, L-810 tower lights can be extinguished. This is typically accomplished in the tower transmission building and does not ordinarily require climbing the tower. For new towers, once the registration is granted, simply construct the tower without installing L-810 lights.

The elimination of continuously burning security lights under towers will also minimize bird attraction to the site and reduce energy costs. Many tower operators use motion sensor-triggered security lighting, which promotes tower safety and reduces the possibility of attracting migratory birds.

For more information about this and other migratory bird or endangered species issues, please contact: Joelle Gehring, Biologist, Federal Communications Commission, (202)270-4435, Joelle.Gehring@FCC.gov