

REQUEST FOR RENEWAL OF DEVELOPMENTAL LICENSE

Louisville Gas and Electric Company (LG&E) hereby requests renewal of its license for developmental authority identified by call sign WQLF 823 (the “License”). The License supports LG&E’s use of the Obstacle Collision Avoidance System (“OCAS System”) at Wise’s Landing, Kentucky.

I. Renewal of Developmental Authority is in the Public Interest

LG&E is currently using the License to support its use of the OCAS System. The OCAS System operates as an integrated air hazard notification system that satisfies the applicable air hazard marking and lighting requirements of the Federal Aviation Administration (“FAA”) through the utilization of radar stations and VHF frequencies generally authorized under part 87 of the Commission’s rules.¹

Three main units comprise the OCAS System: a low-powered continuous wave radar, a VHF radio capable of transmitting concurrently on multiple Part 87 frequencies assignments, and a local power supply that controls the lighting on the structure consistent with the approved marking and lighting requirements of the FAA. The low-powered radar operates continuously and calculates the location, direction and groundspeed of nearby aircraft. The OCAS System uses this information to provide visual and audio warnings to a pilot flying near LG&E’s power lines crossing the Ohio river near Wise’s Landing, Kentucky.

If a nearby aircraft is in danger of colliding with the power lines, the OCAS System activates lights and, if the aircraft continues towards the power lines, transmits an audio warning to the pilot. These dual warnings provide the pilot with time to take corrective action and avoid a collision with the power lines.

Granting the requested renewal will enable LG&E to continue operating the OCAS System, which is in the public interest. The OCAS System promotes the safety of nearby aircraft, the public and surrounding environment. The effectiveness of the OCAS System hinges on its ability to detect an approaching aircraft (through use of the radar frequencies), activate visual warning lights on the obstacle and, if necessary, transmit an audio warning to the pilot (through use of the VHF frequencies). Renewal of the License will permit LG&E to continue operating the OCAS System and thereby promote the safety of pilots and the public near, and preserve the integrity of LG&E’s electric transmission system.

The OCAS System offers substantial environmental benefits as well. For example, the limited obstacle lighting employed by the OCAS System reduces light pollution, power consumption and migratory bird impacts.²

¹ The radar frequencies authorized by the License are 1320 MHz and 1330 MHz and the authorized VHF frequencies are 122.75 MHz and 123.025 MHz.

² The U.S. Fish and Wildlife Service has estimated that between 4 million and 50 million birds die each year as a result of collisions with communications towers.

In light of these safety and environmental benefits, it is possible that advanced Audio Visual Warning Systems (“AVWS”) like the OCAS System will be routinely licensed by the Commission in the near future. Last year, the FCC renewed East Kentucky Power Cooperative, Inc.’s license to operate the OCAS System under a developmental license.³

Finally, by granting the instant request, the Commission will permit LG&E to continue testing the OCAS System in the United States and provide the FCC with valuable data to consider in evaluating the widespread deployment of the OCAS System in conjunction with the Petition for Rulemaking (“Petition”) it filed with the FCC on March 4, 2010.⁴

The Petition requested the Commission to initiate a rulemaking proceeding to establish a new Subpart T, AVWS, under part 87 of its rules. On March 4, 2011, the Commission released a Further Notice of Proposed Rulemaking seeking comment on the Petition.⁵

OCAS, Inc.’s proposed rules would permit owners and operators of antenna towers and other structures to secure authority to operate AVWS stations such as the OCAS System as an alternative to the “always-on” antenna structure lighting systems typically deployed at these facilities. Several comments were received in response to this Petition, and it remains pending before the Commission. To date, the comments filed in this proceeding have largely supported the rulemaking proposal.

II. Report of Operations

In furtherance of its request to renew the License, LG&E provides the following report of its operation as required by Section 87.37(f) of the Commission’s rules.⁶

A. Results of Operation to Date

LG&E began the installation of the OCAS System in June 2010. The system was put into full operation on 17 June 2010.

B. Analysis of the Results Obtained

The site has remained in operation since June 2010 with an operational up time of greater than 99%. This small deviation from 100% is due to minor adjustments to reduce the number of false warnings due to vehicle traffic and other noise in the area. This is part of the standard installation process. On average, the OCAS system is issuing approximately seven light warnings and six audio warnings per day.

³ See, FCC File Number 0005265351.

⁴ See, *Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed*, Public Notice Report No. 2905 (rel. Mar 18, 2010).

⁵ *In Re Amendment of the Commission’s Rules Governing Certain Aviation Ground Station Equipment*, FCC 11-25 (rel. Mar. 4, 2011).

⁶ 47 C.F.R. § 87.37(f).

C. Copies of any Published Reports

No additional published reports have been issued since the previous renewal of this license.

D. Need for the Continuation of the Program

It is imperative that LG&E be able to continue operating the OCAS System at this location. The OCAS System promotes the safety of nearby aircraft, the public and surrounding environment and offers a substantial improvement to the FAA's passive marking and lighting requirements. The effectiveness of the OCAS System hinges on its ability to detect an approaching aircraft (through use of the radar frequencies), activate visual warning lights on the obstacle and, if necessary, transmit an audio warning to the pilot (through use of the VHF frequencies).

This will not only provide enhanced flight safety and protection to LG&E's electric transmission system, but will also allow OCAS to provide the FCC with results from the operation of this system as the Commission considers the Petition.

E. Number of Hours of Operation on Each Authorized Frequency During the Term of the License to Date

The radar component of the OCAS System has split equally its operation on the two radar frequencies since the site became operational. The VHF frequencies have only been activated and used for issuing the audio warnings (average of 6 warnings per day/12 seconds each), resulting in a total of approximately 220 minutes of transmission on each VHF frequency.

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In light of the above, and while the Petition for rulemaking remains pending with the FCC, LG&E seeks renewal of its License and submits that renewal of the License is in the public interest and should be granted by the Commission. Please contact C. Douglas Jarrett (202.434.4210; Jarrett@khlaw.com) or Wes Wright (202.434.4296; wright@khlaw.com) with any questions.