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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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Mr. Donald P. Zeifang
Baker & Hostetler
1050 Connecticut Avenue, N.W.
Washington, DC 20036

Dear Mr. Zeifang:

This is in response to your Petition for Waiver submitted November 15, 1994, on behalf of your client, General Electric Company (GE). In this petition, you request that the Commission grant GE a waiver of its regulations to market RF lighting devices that exceed the AC power line conduction limits, contained in Section 18.307(c) of our rules, 47 CFR Section 18.307(c), within the frequency band 2.2-2.8 MHz. You indicate that the RF lighting devices will comply with all other aspects of our regulations, including authorization under our certification procedure for consumer products. You request that the waiver be effective for a period not to exceed two years or, should GE file a petition to amend the regulations, the conclusion of a rule making proceeding to permanently incorporate new limits in the regulations.

GE's Petition for Waiver was placed on public comment on June 16, 1995, with comments received from Osram Sylvania, Inc., Diablo Research Corporation, the National Electrical Manufacturers Association (NEMA), and the National Telecommunications and Information Administration (NTIA). NTIA is the only party that expresses concern regarding potential interference problems. While NTIA does not object to granting the waiver, it requests additional time for testing these RF lighting devices under actual operating conditions in proximity to co-frequency receivers. NTIA also recommends the addition of an interference warning statement on the packaging of the RF lighting devices. NTIA also recommends that measures be taken to ensure that the bulbs are not used on Safety Of Life At Sea (SOLAS) ships and associated coast stations or at facilities operating standard frequency and time systems, i.e., for reception of WWV at 2.5 MHz. Osram Sylvania and NEMA support issuance of a waiver. Diablo Research objects to granting a waiver primarily because of the significant investment it has made to develop a compliant RF light bulb operating at 13.56 MHz. Instead, Diablo Research asks that RF lighting regulations be addressed by rule making.

We believe that use by consumers of RF lighting devices complying with the conduction limits for non-consumer RF lighting devices in the 2.2-2.8 MHz frequency band would not result in harmful interference to radio services. Radio operations in this band are not normally employed or intended for reception in residential environments. Further, the rules

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already permit RF lighting devices used in commercial environments to place this signal level onto the AC power lines. There has been no record of significant harmful interference problems from the use of these devices in commercial environments.

We agree with NTIA that a warning statement should be employed on the packaging to alert users of the possibility of interference to radio operations in this band, such as ships, coast stations and parties wishing to receive time and frequency transmissions at 2.5 MHz. These provisions should lower the interference potential such that a grant of this waiver would not undermine the purpose of Section 18.307(c).

We appreciate Diablo Research's efforts to develop RF light bulbs that comply with our existing rules. Nevertheless, we find that the potential public benefit of having additional consumer access to energy-efficient and cost-effective RF lighting products outweighs Diablo Research's objections.

Based on the above considerations, as well as the Commission's desire to encourage the substantial energy saving that could be achieved and to promote new and innovative American technology, your request for a waiver of the AC power line conducted limits in the 2.2-2.8 MHz band to employ commercial limits for consumer RF lighting devices is granted in part. GE may market these RF lighting devices, subject to the following conditions:

- The AC power line conducted emissions in the band 2.2-2.8 MHz shall not exceed 70 dB μ V (3000 μ V).
- The RF lighting devices must meet all other administrative and technical requirements in our regulations, including authorization by the FCC and compliance with FCC emissions limits outside the 2.2-2.8 MHz band, prior to marketing.
- The packaging containing the RF lighting devices must be labelled with an advisory statement that addresses the following points: This product may cause interference to radio equipment operating in the frequency range of 2.2-2.8 MHz. Avoid placing this product near these devices. To reduce the possibility of radio interference to maritime safety communications, this device should not be installed: (1) on board cargo vessels of more than 300 gross tons, (2) on board vessels carrying more than twelve passengers for hire, and (3) at any medium frequency public coast station. Further, installation is not recommended on board vessels equipped with medium frequency single side-band marine radios. If interference occurs, move this product away from the device or plug either into a different outlet. Such interference should be reported to [an individual named by GE to receive the complaints].

This waiver is effective for a period not to exceed one year from the date of this letter. We intend to undertake a rule making, as suggested by Diablo Research, in the near future to propose permanent changes to the rules. However, we also reserve the right to revoke this waiver at an earlier time should it be determined that RF lighting devices operating under the conditions of this waiver are creating severe interference problems. If

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the Commission is delayed in introducing a rule making proposal to propose permanent changes to the rules and there are no interference problems from the use of these RF lighting devices, a renewal of waiver can be considered. The Chief, Office of Engineering and Technology, has the delegated authority to extend or reduce the effective period of this waiver.

You also requested a waiver to permit GE to market RF lighting devices to consumers with an AC power line conducted limit of 92 dB μ V (40,000 μ V) in the band 2.2-2.8 MHz. NTIA requested that this proposal be delayed pending further testing of these products. We also believe that the requested waiver to permit a limit of 92 dB μ V should be delayed until some level of experience with RF lighting devices operating at 70 dB μ V is obtained. In the interim, you may wish to consider obtaining a developmental license under Part 5 of our rules to permit limited testing at this higher level.

I trust that this is responsive to your request. Additional questions regarding this waiver should be directed to John Reed, 1300C2, at the address on the letterhead or (202) 776-1627. This letter was adopted by the Commission on October 20, 1995.

BY DIRECTION OF THE COMMISSION

William F. Caton
Acting Secretary