VIVA Comments on Energy Star RLF Specification Version 4 Draft 2

1. **System Efficacy:** – *(reference Table 1- Indoor Fixtures, Performance Characteristic, Combined Lamp & Ballast Requirements: System Efficacy per Lamp Ballast Platform in Lumens Per Watt (LPW), page 5)*
   Currently, the system efficacy requirements are greater than 50 LPW for lamp types below 30 listed watts. While VIVA agrees with this requirement for bare lamps, it would be very difficult for covered replacement lamps such as A-line, Globe and Reflector types to meet the criteria. This is evidenced in the fact that the Energy Star CFL lumen efficacy requirements are divided into three parts: bare lamps; covered lamps; and reflectors.
   G type replacement lamps were developed in order to offer more decorative alternatives to bare spiral and quad lamps. They are especially needed for vanity/bath bars and they offer more design option for fixture manufacturers wanting to offer Energy Star fixtures. A-Type lamps were developed to offer more variety in general lighting applications. **VIVA suggests that system efficacy requirements be divided into three categories (bare lamp, covered lamps, reflectors) similar to that of Energy Star CFL specifications.**

2. **End of Life:** –*(reference Table 1- Indoor Fixtures, Performance Characteristic, Electronic Ballast Requirements: End of Life Protection, page 8)*
   The current End of Life requirement stipulates that if one lamp fails on a ballast that is running multiple lamps; all other lamps shall remain operating. Recall VIVA's first draft comments, **"VIVA suggests that any ballast that drives two or more lamps (Group Control Ballast) be exempt from the current EOL specification."** Reason being that VIVA believes that current specifications are geared towards ballasts driving only one or two lamps. From an engineering standpoint, it is now much more difficult to design ballasts according to the new specification. VIVA's suggestion: **All ballasts driving 3 lamps and less shall have EOL circuitry according IEC specifications. All ballasts driving more than 3 lamps must only shut down the lamp that has reached end of life, provide circuit diagram and description of how end of life protection is achieved.**

3. **Two Way Ballast:** –*(reference Table 1- Indoor Fixtures, Performance Characteristic, Electronic Ballast Requirements: Dimming, page 8)*
   VIVA suggests that two-way ballasts be included in the specification (High-Low-Off) for torchieres. The advantage of two-way ballasts over three lighting levels ballasts is primarily the costs. Two-way ballasts present a much more affordable alternative than three-level brightness ballasts. Both are meant to provide lighting level options for consumers, however, a two-way will be much more attractive to consumers in terms of costs. There are no disadvantages in terms of energy saving capability while offering the possibility of greater market acceptance of fluorescent based torchieres due to reduced pricing. Again, **"VIVA would like to suggest that a two-way ballast specification be added to the Energy Star RLF Specification Version 4."**