

## **EFI Comments on ENERGY STAR Program Requirements for Residential Light Fixtures Draft 1 Eligibility Criteria – Version 4.0**

I appreciate the opportunity to provide the Environmental Protection Agency (EPA) with comments on the proposed changes to the ENERGY STAR Residential Light Fixtures specification. Energy Federation, Inc. (EFI) has been actively promoting and selling hardwire and portable compact fluorescent fixtures for more than fifteen years, primarily to either consumers, or multi-family property owners or managers, so we have a significant interest in this process EPA is undertaking.

I provided several technical comments to EPA when the draft 3.2 specifications first were circulated earlier this year. My comments at this juncture are less technical, and more focused on potential impacts in the lighting fixture industry that these revised specifications may have, and in turn, the impact of those impacts on the marketplace.

1. *Does the lighting fixture industry understand how to find the correct components to help their products meet the revised specifications, and perform reliably?* In EFI's experience, many of the manufacturers that have demonstrated an interest in trying to produce and sell energy efficient lighting fixtures, have little in-house expertise in terms of understanding how compact fluorescent lamps and ballasts work. They are reliant on their sources for these critical components to help them produce 'compliant products.' These suppliers' knowledge of ENERGY STAR may be limited, and their ability and motivation for insuring their ballasts and lamps consistently meet ENERGY STAR standards, may not always be as strong, or resolute, as we might wish. Maybe one year will prove to be sufficient time for the overall quality of critical electronic (compact fluorescent) ballasts and 4-pin lamps to be raised, and/or for fixture manufacturers to distinguish good from not-so-good suppliers of the key components, but I worry it will not be sufficient time.
2. *The NEMA lamp/ballast matrix needs to evolve greatly, and rapidly.* In terms of compact fluorescent fixtures, which use compact (rather than linear) fluorescent lamps, there is a pretty limited selection of qualifying 'platforms.' There are many linear and two-pin lamps listed in the lamp matrix table, for example, but very few four pin compact fluorescent lamps, and no circular or spiral bulbs, which are prominently used lamps in many of the most popular ENERGY STAR fixtures currently in the market.

On the subject of the NEMA lamp/ballast matrix, it appears to me that specifications are currently self-reported. I don't know if the companies listing their lamps and ballasts in the matrix provide underlying, independent test data for their products to NEMA. It would seem to be problematic to require companies not using lamps and ballasts on the NEMA list to provide independent test results if those companies whose products are on the NEMA list are not required to do so.

3. *How will manufacturers react to testing requirements, and testing costs?* EFI is supportive of measures that will improve the quality of ENERGY STAR lighting products, and certainly more emphasis on testing should ultimately lead to better performing, more reliable fixtures. We do wonder whether testing requirements may discourage some smaller manufacturers from participating in the ENERGY STAR program. The fixture and bulb industries are very different. Most CFL manufacturers have limited skus and large volume sales. Many fixture manufacturers, however, offer many different models, but sell comparatively few of the significant majority of their product line. Running tests on color temperature and maximum ballast case temperatures (in fixtures, with the fixtures actually operating) might dissuade some manufacturers from being as supportive of the ENERGY STAR program as they might be otherwise.

EFI does not intend to argue that EPA should eliminate its requirement that ENERGY STAR fixtures, and their critical components, should be tested to insure they meet stated claims about their performance and reliability. But this requirement should be made in a way that hopefully minimizes industry costs. Perhaps manufacturers should not have to re-test approved products provided they have not changed key components since the products received initial listing.

4. *Is it essential that all ENERGY STAR fixtures have electronic ballasts?* If industry is comfortable moving to an all-electronic ballast standard, and believes it can do so without sacrificing product reliability, EFI will be content. If industry feels this requirement is ill advised, or will require compliance prematurely, EFI would be concerned. (We will confess that we have not heard much one way or another about this subject from the various manufacturers who supply us with ENERGY STAR fixtures.) We understand the passage of Title 24 in California has established a requirement for all energy efficient (compact fluorescent) fixtures going into new homes to have electronic ballasts, and given the magnitude of the California market, there are clear advantages to having ENERGY STAR specifications correspond with the Title 24 specifications where possible.

EFI's historical experience with electronically ballasted fixtures has been somewhat checkered. We understand that it is important for many fixtures to be electronically ballasted if they are to ever gain widespread consumer acceptance. This is true of virtually all interior fixtures. On the other hand, it is probably not critical that many exterior fixtures have electronic ballasts.

If ENERGY STAR is a little 'too far ahead of the curve,' in terms of aligning its label, and reputation, to fixtures whose performance in the market may be erratic, will enduring harm be done to the program, and 'brand?' Again, if industry is mute on this point, and appears confident that ballast technology can improve sufficiently quickly to meet the October 2005 guideline, than EFI's concern on this point will be unfounded.

Thank you for the opportunity to comment.

Sincerely,

Bradley Steele  
President, EFI