

Dear Mr Baker,

Please find enclosed our comments on Energy Star draft:

1. Power factor.

We recommend against mandating high power factor. Degradation in power factor is more than balanced by drop in energy consumption through switching to LED or CFL lighting.

Power factor drop, as applied to efficient lighting, is caused by increase in peak current vs purely resistive loads. It is only peripherally related to power needed to be generated by utility companies, through higher I²R losses in transmission line and need for additional (unused) power generating capacity.

Mandating minimum power factor would make sense if new power lighting was of identical power consumption. LED or CFL light bulbs consume significantly less power than what grid had been designed for. Peak current increase for low power factors is negligible compared to x5-8 reduction in current consumption due to usage in more energy-efficient lighting. Using energy-efficient lamps with virtually ANY power factor would require less current and is better than using incandescent lamps, for both utilities and consumers.

Increasing power factor would result in increase in cost and size of light bulbs and lowers their efficiency.

At present energy efficient lighting is significantly more expensive than incandescents, and the main challenge is to convince consumer to choose more expensive alternative. Adding technical requirement that makes that alternative even more expensive and provides no benefit for consumer is not helpful in solving that challenge.

2. Lamp Toxics Reduction Requirements.

With exception of mercury limits, we recommend against mandating any ROHS like requirements in energy-efficient lamps. The companies who plan to sell to Europe and California would have to satisfy ROHS requirements already. There should be no need to add requirements that addressed elsewhere.

Best regards,

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