

**United States Department of Energy
Office of Hearings and Appeals**

In the Matter of:)
)
Tailored Lighting, Inc.) Case No.: EXC-12-0007
)
Filing Date: May 7, 2012)
_____)

Issued: October 23, 2012

Decision and Order

This Decision and Order considers an Application for Exception filed by Tailored Lighting, Inc. (TLI or the Applicant), seeking exception relief from the applicable provisions of 10 C.F.R. Part 430, Energy Conservation Program: Energy Conservation Standards and Test Procedures for General Service Fluorescent Lamps and Incandescent Reflector Lamps (Lighting Efficiency Standards). In its exception request, the Applicant asserts that it will face a serious hardship, gross inequity, and an unfair distribution of burdens if required to comply with the Lighting Efficiency Standards, set forth at 10 C.F.R. § 430.32(n), pertaining to its “PAR-shaped daylight incandescent reflector lamps,” also known as SoLux PARS. As set forth in this Decision and Order, we have concluded that TLI’s Application for Exception should be dismissed in part and denied in part.

I. Background

A. Lighting Efficiency Standards

Title III of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6291 *et seq.*) (EPCA or the Act) established the Energy Conservation Program for Consumer Products Other Than Automobiles, designed to improve energy efficiency of covered major household appliances. Incandescent reflector lamps (IRLs) were among the consumer and commercial products subject to the program. Amendments to Title III of the EPCA in the Energy Policy Act of 1992, P.L. 102-486, established energy conservation standards for certain types of IRLs based upon minimum average lumens-per-watt (lm/W) efficacy, effective November 1, 1995, as follows:

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (lm/W)
40-50	10.5
51-66	11.0
67-85	12.5
86-115	14.0
116-155	14.5
156-205	15.0

42 U.S.C. § 6295(i)(1); 10 C.F.R. § 430.32(n)(4); *see* 74 Fed. Reg. 34080, 34083 (July 14, 2009) (the 1995 Efficiency Standards).

The amendments to Title III of the EPCA also direct the U.S. Department of Energy (DOE or the Agency) to conduct two cycles of rulemakings to determine whether to amend these standards.¹ 42 U.S.C. § 6295(i)(3)-(4). Following the first review cycle, DOE concluded that the standards should be updated, and the Agency ultimately issued the Lighting Efficiency Standards, published in the *Federal Register* as a final rule by DOE on July 14, 2009. 74 Fed. Reg. 34080, 34082; 10 C.F.R. § 430.32(n)(3) (2009 Final Rule). Under the Lighting Efficiency Standards, standard spectrum and modified spectrum IRLs must achieve the following minimum average lumens-per-watt (lm/W) lamp efficacy, effective July 14, 2012:

Rated Lamp Wattage	Lamp Spectrum	Lamp Diameter (inches)	Rated Voltage	Minimum Average Lamp Efficacy (lm/W) ²
40-205	Standard	>2.5	≥125V	6.8*P ^{0.27}
			<125V	5.9*P ^{0.27}
		≤2.5	≥125V	5.7*P ^{0.27}
			<125V	5.0*P ^{0.27}
40-205	Modified	>2.5	≤125V	5.8*P ^{0.27}
			<125V	5.0*P ^{0.27}
		≤2.5	≥125V	4.9*P ^{0.27}
			<125V	4.2*P ^{0.27}

See 74 Fed. Reg. 34080, 34082 (July 14, 2009); 10 C.F.R. § 430.32(n)(5) (the 2012 Efficiency Standards).

¹ The EPCA provides that any new or amended energy conservation standard that DOE prescribes must be designed to “achieve the maximum improvement in energy efficiency . . . which the Secretary determines is technologically feasible and economically justified.” 42 U.S.C. § 6295(o)(2)(A).

² P is equal to the rated lamp wattage, in watts.

B. Application for Exception

TLI is a lighting manufacturer based in Rochester, New York. Its primary product is its PAR-shaped daylight incandescent reflector lamp, also known as the SoLux PAR.³ See Application for Exception at 4.

In its Application, TLI requests relief from the 1995 Efficiency Standards. See *id.* at 1; see also 42 U.S.C. § 6295(i)(1)(B); 10 C.F.R. § 430.32(n)(4). TLI maintains that the company is a small business and will be forced to shut down operations if denied exception relief. Application for Exception at 4. According to the Application, the SoLux PARs account for more than 35% of the company's sales. *Id.* at 6. TLI maintains that it has worked on developing more efficient alternatives to the SoLux PAR for more than five years, using light-emitting diode (LED) or infra red coated (IRC) technology, but has been unsuccessful in developing a compliant product that offers the same utility as the SoLux PAR lamp. *Id.* Consequently, in the absence of a viable alternative to the SoLux PAR, TLI maintains that it will suffer serious hardship, gross inequity, and an unfair distribution of burdens if required to comply with the 1995 Efficiency Standards.

C. Comments

OHA received two sets of comments on TLI's Application for Exception, both in opposition to the requested exception relief. One set of comments was filed jointly by Earthjustice, the Appliance Standards Awareness Project, the American Council for an Energy Efficient Economy, and the Northwest Energy Efficiency Alliance (Earthjustice, *et al.*). Pacific Gas and Electric Company (PG&E) and Southern California Edison (SCE) filed the second set of comments.

1. Earthjustice, *et al.*, Comments

Earthjustice, *et al.*, argue against our approval of exception relief on three grounds. First, they contend that OHA does not have the jurisdiction to consider TLI's request for exception relief. Earthjustice, *et al.*, Comments (May 18, 2012). Specifically, they allege that TLI's SoLux PAR not only fails to meet the 2012 Efficiency Standards set forth in the 2009 Final Rule, but also fails to comply with the 1995 Efficiency Standards. In addition, Earthjustice, *et al.*, state that OHA's authority to grant exception relief extends only to DOE-promulgated rules, regulations, or orders, and not to statutorily-mandated standards. *Id.* at 1-2. According to Earthjustice, *et al.*, "because any adjustment to DOE's regulations at 10 C.F.R. § 430.32(n) [(the 2012 Efficiency Standards)] would not alter the underlying statutory requirement found at 42 U.S.C. § 6295(i)(1), OHA cannot provide TLI the relief that it seeks." *Id.* at 2.

Next, Earthjustice, *et al.*, argue that, even if OHA has the jurisdiction to consider TLI's exception request, exception relief is unwarranted here because TLI's alleged hardship is not the result of a DOE rule, regulation, or order. Rather, they maintain that TLI's alleged hardship results from the company's own "imprudent discretionary business decision" to pursue

³ According to the company's website, TLI also manufactures a low-voltage version of the SoLux lamp, the SoLux MR-16, which does not fall within the purview of the Lighting Efficiency Standards, as well as a number of other lamps and fixtures. See www.solux.net (TLI's website).

development of a product that did not comply with the existing 1995 Efficiency Standards, let alone the impending 2012 Efficiency Standards and, therefore, does not warrant exception relief. *Id.* at 2-3.

Finally, Earthjustice, *et al.*, note that, although TLI maintains that the SoLux PARs carry a significantly higher price per bulb and are, therefore, used primarily in museum and gallery settings rather than in general lighting applications, a review of the testimonials included with the Application for Exception indicates that consumers are installing the lamps in more general lighting applications, despite their higher cost. Moreover, TLI itself markets the lamps as suitable for more applications than museum and gallery lighting. The commenters allege that this creates a risk that, were OHA to grant TLI's request for exception relief, the excepted lamps will be more prominent in the market than first intended and, as a result, will become a "loophole" to the 2009 Final Rule that "erodes the energy savings anticipated from [the 2012 Efficiency Standards]" *Id.* at 4.

2. PG&E/SCE Comments

PG&E and SCE oppose TLI's request for exception relief, largely echoing the arguments made by Earthjustice, *et al.*, regarding TLI's discretionary business decision to develop a lamp that did not comply with the existing statutory efficiency standards. PG&E and SCE Comments (May 18, 2012), at 1-2. PG&E and SCE also raise the same concern addressed by Earthjustice, *et al.*, that a grant of exception relief to TLI will result in a "loophole" to the 2009 Final Rule. Specifically, they argue that, once granted an exception from the 2012 efficiency standards, the SoLux PARs may be used more frequently in general lighting applications, rather than just in museum and gallery lighting, effectively eliminating the energy savings intended by the 2012 efficiency standards. *Id.* at 3. Finally, PG&E and SCE maintain that exception relief is unwarranted in this case because SoLux PARs do not provide any unique functionality or utility not attainable by other, more efficient, technologies. *Id.* at 2-3.

3. TLI's Response

Regarding the issue of whether OHA has jurisdiction to consider TLI's exception request, TLI maintains that the SoLux PARs are not covered by the 1995 Efficiency Standards for IRLs because SoLux is a colored lamp. TLI Response to Comments, received June 8, 2012, at 1. Specifically, TLI maintains that the SoLux PARs mimic daylight, and "the daylight spectrum is a different color than the light emitted by a general service IRL." *Id.* As for the contention that TLI should be denied relief because it made a discretionary business decision to develop the SoLux PARs, TLI states that it "cannot be faulted for furthering the development and implementation of the SoLux PAR after spending seven years of product development before the introduction of the law (the 2009 Final Rule)." *Id.* at 2. TLI further maintains that it filed a comment to the 2009 Final Rule and DOE's own response to the comment "also encouraged TLI to go forward."⁴ *Id.* In addition, TLI disagreed with the contention that the SoLux PARs do not

⁴ TLI's comment to the 2009 Final Rule requested that the DOE create a separate product class for the forthcoming SoLux PARs, which were not yet for sale at the time of the rule's promulgation, thereby exempting it from the requirements of the rule. In responding to TLI's comment in the final rule, the agency states, "the DOE generally sets separate efficiency standards for products deemed to be in separate product classes. While PAR-shaped [TLI]

offer a distinct utility and that alternative, more efficient technologies exist that offer the same functionality. *Id.* at 3-7. TLI maintains that the light produced by the alternative technologies referred to in the comments is not equivalent to that emitted by SoLux PARs and the long-term effects of those alternative lamps on rare works of art are unknown. *Id.* Finally, with respect to the “loophole” concern advanced in both sets of comments, described above, TLI dismisses the concern on the basis of the cost of the lamps. According to TLI, even if it is granted exception relief, the concern that SoLux PARs will become more widespread in the market and, therefore, a “loophole” to the 2009 Final Rule is unwarranted because, although museums and galleries are willing to pay the higher-than-average cost of the SoLux PARs in order to properly light and protect rare works of art, average consumers are unlikely to pay the higher prices of the bulbs for day-to-day lighting applications. *Id.* at 7.

II. Analysis

A. OHA’s Exception Authority

Section 504 of the Department of Energy Organization Act, 42 U.S.C. § 7194(a), authorizes the Secretary of Energy to make “such adjustments to any rule, regulation, or order” issued under the EPCA, consistent with the other purposes of the Act, as “may be necessary to prevent special hardship, inequity, or unfair distribution of burdens.” The Secretary has delegated this authority to the DOE Office of Hearings and Appeals (OHA), which administers exception relief pursuant to procedural regulations codified at 10 C.F.R. Part 1003, Subpart B. Under these provisions, persons subject to the various product efficiency standards of Part 430 promulgated under DOE’s rulemaking authority may apply to OHA for exception relief. *See, e.g., Amana Appliances*, OHA Case No. VEE-0054 (1999); *Midtown Development, L.L.C.*, OHA Case No. VEE-0073 (2000); *Diversified Refrigeration, Inc.*, OHA Case No. VEE-0073 (2001).

B. SoLux PARs and Whether They Are a Covered Product

In its Application, TLI specifically requested exception relief from the 1995 Efficiency Standards set forth in the EPCA at 42 U.S.C. § 6295(i)(1)(B). Nothing in the record indicates that TLI challenged the applicability of the statute to the SoLux PARs. Nonetheless, in responding to interested party comments that this office received in connection with TLI’s Application, TLI now maintains that the 1995 Efficiency Standards set forth in the EPCA do not apply to the SoLux PARs because the lamps are colored lamps and are exempt from the statute. Therefore, we will first address the threshold issue of whether the SoLux PAR is a covered product subject to the 1995 Efficiency Standards and, subsequently, the enhanced 2012 Efficiency Standards.

The SoLux PARs have a voltage of 120 volts, an E26 medium screw base, a color rendering index (CRI) of 92+, and a correlated color temperature (CCT) of 3500K. *See* SoLux Halogen

lamps may in the future provide a distinct utility to consumers (a basis on which product classes are established), at this time, because there is no product yet developed, DOE has no evidence that this utility in fact exists or is even required of the [IRL] (or PAR-shaped) market. Therefore, in this Final Rule, DOE is not establishing a separate class for [TLI]’s products. However, DOE notes that if [TLI] successfully develops its PAR lamp and believes that it warrants exemption from *DOE’s amended standards*, it may be possible for [TLI] to seek exception relief from DOE’s OHA pursuant to 10 C.F.R. Part 1003.” 74 Fed. Reg. 34080, 34101 (July 14, 2009) (emphasis added).

Lamps, <http://www.eiko.com/products.aspx?CatID=40>. TLI sells SoLux PARs in three configurations: PAR20, a 50-watt/275 lumens bulb with a diameter of 2.5 inches; PAR 30, a 75-watt/600 lumens bulb with a diameter of 3.75 inches; and, PAR 38, a 90-watt/800 lumens bulb with a diameter of 4.75 inches. *Id.* Based on these specifications, the average lamp efficacy of the bulbs is as follows: PAR20 – 5.5 lm/W, PAR30 – 8.0 lm/W, and PAR38 – 8.9 lm/W.

In setting specific energy efficiency standards for certain types of IRLs, the EPCA defined an IRL as “any lamp ... which is not colored or designed for rough or vibration service applications, that contains an inner reflective coating on the outer bulb to direct the light, an R, PAR, ER, BR, BPAR, or similar bulb shapes with E26 medium screw bases, a rated voltage or voltage range that lies at least partially within 115 and 130 volts, a diameter which exceeds 2.25 inches, and has a rated wattage that is 40 watts or higher.” 42 U.S.C. § 6291(30)(c)(ii); 10 C.F.R. § 430.2; *see also* Section I. A., *supra*. In the Energy Independence and Security Act of 2007 (EISA) (Pub. L. 110-140), enacted on December 19, 2007, Congress amended section 321(30) of the EPCA (42 U.S.C. § 6291(30)) to, *inter alia*, further define a “colored incandescent lamp” as “an incandescent lamp designated and marketed as a colored lamp that has (i) a color rendering index of less than 50 ... and (ii) a correlated color temperature of less than 2500K, or greater than 4600K” 42 U.S.C. § 6291(30)(EE); 10 C.F.R. § 430.2.

Given these definitions and the specifications of the SoLux PARs, regardless of TLI’s new claim that the SoLux PARs are colored lamps, the lamps clearly do not meet the technical specifications for colored lamps within the meaning of the Act and are, therefore, IRLs subject to the 1995 Efficiency Standards.⁵

C. TLI’s Request for Exception Relief

Under the 1995 efficiency standards, the required minimum average lamp efficacy for a particular bulb is based on its wattage. For SoLux PARs, the required minimum lamp efficacy was as follows: PAR20 – 10.5 lm/W, PAR30 – 12.5 lm/W, and PAR38 – 14.0 lm/w. *See* 42 U.S.C. § 6295(i)(1); 10 C.F.R. § 430.32(n)(4). The standards were prescribed by Congress in the 1992 amendments to the EPCA, and not by the DOE. As noted above, OHA’s exception authority permits OHA to consider requests for exception only as they pertain to a DOE-promulgated rule, regulation, or order. Consequently, OHA does not have jurisdiction to consider a request for exception that purports to adjust efficiency standards set forth by statute. *See United CoolAir Corp.*, OHA Case No. TEE-0062 (2010). Therefore, TLI’s request for exception, as it pertains to the 1995 efficiency standards, must be dismissed. The only remaining question is whether OHA should grant TLI an exception from the enhanced 2012 efficiency standards, thus maintaining the original 1995 efficiency standards as the required minimum average lamp efficacy for the SoLux PAR. We have determined that such exception relief is unwarranted in this case.

⁵ The SoLux PARs also do not fall within the definitions of “rough service lamps” or “vibration service lamps” set forth in the Act. *See* 42 U.S.C. §§ 6291(30)(X), (AA).

Based on the SoLux PAR specifications, the minimum average lamp efficacy required by the 2012 efficiency standards for the SoLux PAR20, PAR30, and PAR38 lamps is 14.38 lm/W, 18.93 lm/W, and 19.88 lm/W, respectively, if the lamps are standard spectrum lamps. If they are considered modified spectrum lamps, the required minimum lamp efficacy is 12.08 lm/W for PAR20, 16.05 lm/W for PAR30, and 16.85 lm/W for PAR38. In evaluating TLI's exception request, we informed the company of our view that, for the purpose of determining the applicable minimum average lamp efficacy, the SoLux PARs fall within the standard spectrum. We also invited the company to submit information demonstrating that the lamps qualify as modified spectrum if it disagreed with our assessment. *See* Email from Diane DeMoura, Attorney-Examiner, OHA, to Kevin McGuire, President, TLI, July 16, 2012. None of the arguments that TLI advanced in response to our request evidence that the SoLux PARs qualify as modified spectrum lamps under the regulatory definition.⁶

In determining whether exception relief is warranted in this case, we have evaluated all of the information that TLI submitted in support of its Application, as well as the interested party comments. It appears that as a small business TLI does, indeed, experience hardship with respect to its SoLux PARs attaining the required minimum average lamp efficacy. Nonetheless, we have determined that TLI should not be granted the exception relief that it seeks.

Despite TLI's argument that it "should not be faulted" for introducing the SoLux PARs into the market "after spending seven years [on] product development before the introduction of the [2009 Final Rule]," we find that the company knowingly chose to develop and market a product that would not meet the impending 2012 efficiency standards, which were set forth in the 2009 Final Rule six months before TLI began selling the SoLux PARs. Moreover, the product also failed to comply even with the existing requirements of the 1995 efficiency standards, which were in place long before TLI began *development* of the SoLux PARs. It is possible that if TLI did, in fact, believe during its development of the SoLux PARs that the lamps were exempt from the Act, one might argue that its decision to develop the lamps at their existing efficiency levels was not unreasonable. However, nothing in the record before us demonstrates that TLI believed during the development process that the SoLux PARs were not subject to the 1995 efficiency standards set forth in the EPCA. In its comment to the 2009 Final Rule, TLI addressed only its

⁶ Specifically, in order to qualify as lamp as "modified spectrum," a manufacturer must demonstrate that the lamp is "an incandescent lamp that –

- (1) is not a colored incandescent lamp; and
- (2) when operated at the rated voltage and wattage of the incandescent lamp –
 - (A) has a color point with (x, y) chromaticity coordinates on the C.I.E. 1931 chromaticity diagram, figure 2, page 3 of IESNA LM-16 ... that lies below that black-body locus; and
 - (B) has a color point with (x, y) chromaticity coordinates on the C.I.E. 1931 chromaticity diagram, figure 2, page 3 of IESNA LM-16 ... that lies at least four MacAdam steps, as referenced in IESNA LM-16, distant from the color point of a clear lamp with the same filament and bulb shape, operated at the same rated voltage and wattage.

See 10 C.F.R. § 430.2. TLI's response to our inquiry did not include the information required to establish the lamps as modified spectrum lamps. *See* Email from Kevin McGuire to Diane DeMoura, July 25, 2012. In any event, the question of whether the standard spectrum or modified spectrum efficiency standards apply is immaterial because, at an average lamp efficacy ranging from 5.5 lm/W to 8.9 lm/W, the SoLux PARs fall far short of both standards.

concern that the SoLux PARs could not meet the rule's definition of "modified spectrum" lamps. At no point in its comment did TLI challenge the applicability of the rule or the underlying statute to the SoLux PARs. Moreover, TLI did not challenge the applicability of the statute in the instant Application for Exception. To the contrary, the company specifically requested an exception from the statute. In fact, the first time that TLI raised its argument that the SoLux PARs were exempt from the statute due to being "colored" lamps was in response to the interested party comments described above. In any event, even if TLI did mistakenly believe in the initial development process of the SoLux PARs that the lamps were not subject to the efficiency requirements of the EPCA, TLI knew or should have known that its assumption was incorrect by 2007, three years before the introduction of the SoLux PARs into the market, when Congress amended the Act to include a specific definition of a "colored incandescent lamp," a definition that the SoLux PARs did not meet. Despite this, TLI continued developing a product that the company knew did not meet the existing, or impending, efficiency requirements. Therefore, any hardship experienced by the company is attributable to its own discretionary business decision to market a non-compliant product, rather than to the efficiency standards themselves. It is well-settled that a firm may not receive exception relief to alleviate a burden resulting from a discretionary business decision rather than the impact of DOE regulations. See *DLU Lighting USA*, OHA Case No. EXC-12-0010 (2012); *GE Appliances & Lighting*, OHA Case No. TEE-0077 (2011); *United CoolAir Corp.*, OHA Case No. TEE-0062 (2010); *Refricenter International*, OHA Case No. TEE-0024 (2005).

Even assuming *arguendo* that TLI's hardship is not the result of its own discretionary business decision to introduce a noncompliant lamp into the market, we are unable to grant the requested exception relief. OHA has authority to grant exception relief to alleviate serious hardship, gross inequity, or an unfair distribution of burdens attributable to an *agency-promulgated* rule, regulation or order. The only DOE-issued rule, regulation, or order at issue in this case – the 2009 Final Rule setting forth the 2012 efficiency standards – is not the cause of any hardship experienced by TLI. The average lamp efficacy of the SoLux PARs is far below the minimum average lamp efficacy specified by the 1995 efficiency standards, which were the statutory requirements in existence at the time the SoLux PARs were introduced into the market. Therefore, even absent our view that TLI's hardship results from its own discretionary business decision, to the extent that any hardship exists here, it results from the applicability of the statute itself, not from a DOE rule, regulation, or order. Consequently, TLI's requested exception relief does not fall within the scope of OHA's exception authority.

Finally, even if OHA had authority to grant TLI exception relief, there is no meaningful relief that we could grant to TLI. Because SoLux PARs are covered by the EPCA and the statute itself specifies the applicable efficiency standards, the 1995 efficiency standards represent the absolute minimum efficiency level to which the SoLux PARs must adhere. Put another way, even if OHA were to grant TLI an exception from subsequent enhanced efficiency standards adopted by the DOE, such as the 2012 efficiency standards, our exception relief could not be fashioned in such a way as to allow TLI to produce an IRL whose average lamp efficacy is less than the statutory requirements. As mentioned above, the average lamp efficacy of the SoLux PARs is far below the requirements set forth in the 1995 efficiency standards. Moreover, although TLI has attempted to develop more efficient alternatives, the company does not appear to have made inroads in making the SoLux PARs themselves more efficient. Therefore, even if we were to

grant relief, the only relief we could give – excusing TLI from the requirements of the 2012 efficiency standards – would still not alleviate TLI’s hardship. Therefore, TLI’s request should be denied.

III. Conclusion

As explained above, TLI has failed to satisfy its burden of establishing that, if required to comply with the new Lighting Efficiency Standards that went into effect on July 14, 2012, the firm will suffer special hardship, gross inequity, or an unfair distribution of burdens attributable to a DOE rule, regulation, or order. Therefore, we find that exception relief is not warranted in this case.

It Is Therefore Ordered That:

(1) The Application for Exception filed by Tailored Lighting, Inc. (TLI), on May 7, 2012, Case No. EXC-12-0007, is hereby dismissed in part and denied in part, as set forth in paragraphs (2) and (3) below.

(2) The portion of TLI’s Application for Exception pertaining to the 1995 efficiency standards, set forth in the Amendments to Title III of the EPCA in the Energy Policy Act of 1992, 42 U.S.C. § 6295(i)(1), is hereby dismissed.

(3) The portion of TLI’s Application for Exception pertaining to the 2012 efficiency standards, adopted by the DOE in the 2009 Final Rule, 10 C.F.R. § 430.32(n)(5), is hereby denied.

(4) Any person aggrieved or adversely affected by the denial of a request for exception relief filed pursuant to § 504 of the Department of Energy Organization Act, 42 U.S.C. 7194, may appeal to the Federal Energy Regulatory Commission, in accordance with the Commission’s regulations.

Poli A. Marmolejos
Director
Office of Hearings and Appeals

Date: October 23, 2012