

The ENERGY STAR® Residential Light Fixture Advancement Project

Invitation to Participate

Date Issued: March 15, 2003

Contact Person: Mike Plasski
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Springfield, MA 01103
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Project Sponsor: The California Energy Commission
Public Interest Energy Research (PIER)

PROJECT DESCRIPTION

The ENERGY STAR Residential Fixture Advancement Project has been designed to encourage lighting fixture manufacturers to develop higher-end portable indoor residential light fixtures (table or floor) destined for the California marketplace. Funds will be provided under the California Energy Commission (CEC) PIER Lighting Research Program to defray manufacturer's costs for the design, development, and testing of these products for the ENERGY STAR program through this project. Under a match-funding arrangement, this project will reimburse selected manufacturers for 50 percent of their costs.

PROJECT GOALS

The ENERGY STAR Residential Fixture Advancement Project will work with four to eight fixture manufacturers to develop four to eight higher-end residential indoor ENERGY STAR qualified table and floor lamp fixtures. Through this process, Applied Proactive Technologies (APT) will coordinate and communicate with the Lighting Showrooms, the American Lighting Association (ALA), the Environmental Protection Agency (EPA), the Consortium for Energy Efficiency (CEE) and other groups to help broadcast the progress and success of the efforts. Final designs will be posted on the ALA, EPA, CEC, CEE, and APT web sites.

The overall goals are to design the fixture, gain ENERGY STAR qualification, produce and sell the final product in the California market place and provide documentation of the production and shipments.

Specific goals of the program are:

- Work with four to eight manufacturers.
- Develop, test and produce four to eight high end portable indoor residential ENERGY STAR qualified fixtures.
- distribute products and have widely available for consumers in California.

PROJECT PROCESS DESCRIPTION

APT has assembled a Technical Review Committee (TRC) to assist the manufacturers during this project. The members of this committee are nationally recognized experts in the lighting and

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design industry. The TRC will work with selected manufacturers to design and develop prototypes, verify these products meet ENERGY STAR standards, and ensure the fixtures are produced and made commercially available in the California market. APT will work with selected manufacturers to measure production and shipments within California.

All lighting fixture manufacturers are invited to respond. The deadline for submission is **Friday, April 18, 2003 5:00pm (EST)**. Interested manufacturers are asked to respond to this invitation by summarizing, in writing, their interest and ability to meet the participation requirements identified within this Invitation to Participate as specified below. Each manufacturer can submit proposals for more than one fixture or line of fixtures. Proposals may be submitted electronically in PDF format to mikep@appliedproactive.com or submit one hard copy to:

Mike Plasski
Applied Proactive Technologies, Inc.
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Phone: 413-731-6546

The Technical Review Committee (TRC) will review all submissions in order to identify those responses that most clearly meet the intentions of this project. Selected participants will be notified by May 9, 2003.

PROJECT TIMELINES

Respondents must be able to adhere to the following timelines. Proposals demonstrating ability to accelerate the process will be viewed favorably.

- Invitation to Participate distributed March 14, 2003
- Intention to Participate submitted March 21, 2003
- Questions due by 5:00pm EST March 28, 2003
- Answers to questions distributed March 31, 2003
- Proposals due back April 18, 2003
- Notify selected manufactures May 9, 2003
- Contracts signed APT/Manufacturers June 6, 2003
- Manufacturer kick off meetings completed June 20, 2003
- Submittal of prototype fixtures and documentation October 1, 2003
- TRC prototype fixture feedback report sent to manufacturers October 17, 2003
- TRC suggestions integrated - final prototype produced December 15, 2004
- Final prototype documentation submitted December 15, 2004
- Manufacturers obtain/submit ENERGY STAR certification January 22, 2004
- Factory Production Readiness Plans submitted March 26, 2004
- Products commercially available in California April 23, 2004
- Monthly production and shipment data submitted through September 1, 2004
- Submittal of final fixture design specifications August 1, 2004

MANUFACTURER REQUIREMENTS AND RESPONSIBILITIES

Enter Into a Contractual Agreement with APT (June 6, 2003 or Sooner)

- Each selected manufacturer will be required to enter into a contract with APT indicating their adherence to timelines, their compliance with ENERGY STAR specifications and performance criteria, adherence to their submittal and their ability to produce and distribute products in the California marketplace.

Design a High End Indoor Portable Fixture to be ENERGY STAR Qualified

Develop a Prototype In Compliance with Most Current ENERGY STAR Criteria and Performance Specifications (October 1, 2003 or Sooner)

- Prototypes must meet most current ENERGY STAR criteria and performance specifications for indoor residential lighting fixtures.
- For prototypes not utilizing NEMA / ALA Lamp and Ballast Matrix, manufacturers will provide APT with a signed documentation that they are designing and developing the prototype in compliance with most current ENERGY STAR criteria and performance specifications. The document must also list specific information with regard to final projected operating specifications and performance (Please see attached form).
- For prototypes utilizing the NEMA / ALA Lamp and Ballast Matrix, manufacturers will provide APT with ENERGY STAR Qualified Product Information Form (form only), and Supplemental NEMA / ALA Matrix Form For Residential Light Fixtures.

Refine Prototype per TRC's Suggestions - Remaining In Compliance with Most Current ENERGY STAR Criteria and Performance Specifications (December 15, 2003 or Sooner)

- Manufacturers will integrate TRC's suggestions into final design of prototype.
- Manufacturers will submit to APT a letter stating that modifications were made and that the prototype is still in compliance with most current ENERGY STAR criteria and performance specifications.
- Depending on the nature of the modifications, there may be a need to re-submit written specification and performance documentation referenced above. This will be determined on a case by case basis.
- Should manufacturers decide that any or all modifications cannot be made, their reasoning is required to be submitted in writing. The TRC through APT will then notify the manufacturer of its intention on whether or not the manufacturer will be allowed to continue with the project.

Obtain ENERGY STAR Certification (January 22, 2004 or Sooner)

- Manufacturers must submit Formal ENERGY STAR Approval Letter from EPA certifying that the light fixture has been approved.

Provide Production Readiness Plans for Fixtures (March 26, 2004 or Sooner)

- Manufacturers must submit to APT the Factory's Production Readiness Plan.

Develop a Commercially Available Product for Each Prototype (April 23, 2004 or sooner)

- Manufacturers must demonstrate that products are commercially available in California for consumer purchase. This includes availability in retail locations, lighting showrooms, California specific catalogs, and/or web-sites with a focus on the California marketplace, etc.

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Provide Final Fixture Design Specifications (August 1, 2004 or Sooner)

- Provide final fixture design specifications for posting on EPA, CEC, CEE, ALA and APT web-sites.

Provide On-Going Monthly Production and Shipment Data (Through September 1, 2004)

- Manufacturers must provide monthly production and shipment data. It should be noted that shipment data to retail locations in California is required although demonstrating shipments outside of California is encouraged to assist in determining the full effects of this effort.

PROJECT FUNDING

Funding in the amount of \$100,000.00 is available for this project. This project will provide match funding to selected manufacturers for 50 percent of their costs to design, develop, and test fixtures for ENERGY STAR qualification.

Funding will be paid out according to the following payment schedule:

Task	Percent (%) of Total Funding
Design a High End Portable Fixture to be ENERGY STAR Qualified	
Develop a Prototype In Compliance with Most Current ENERGY STAR Criteria and Performance Specifications (October 1, 2003 or Sooner)	
Refine Prototype per TRC’s suggestions and Re-submit Documentation of Compliance with Most Current ENERGY STAR Criteria and Specifications (December 15, 2004 or Sooner)	25%
Obtain ENERGY STAR Certification (January 22, 2004 or Sooner)	25%
Provide Production Readiness Plans for Fixtures (March 26, 2004 or Sooner)	
Develop a Commercially Available Product for Each Prototype (April 23, 2004 or Sooner)	40%
Provide On-Going Monthly Production and Shipment Data (Through September 1, 2004 or sooner)	
Provide Final Fixture Design Specifications (August 1, 2004 or Sooner)	10%

PROPOSAL RESPONSE

All participants must meet and address the following criteria in their response. The purpose of this section is to provide proposers with a required format and a key to the elements that should be included. Simple statements are sufficient.

1. Introduction (one page maximum) - a description of the company and its involvement in the ENERGY STAR program.
2. Statement of Work
 - Ability to meet or accelerate project timelines – provide accelerated timeline or statement to meet stated project timelines.
 - Experience in developing high end indoor residential table and floor lamp fixtures for and obtaining ENERGY STAR qualification.
 - Method utilized to obtain ENERGY STAR qualification and certification (i.e. utilizing NEMA / ALA lamp and ballast matrix or obtaining certification on a new platform).
 - Willingness to integrate the TRC’s suggestions into final prototype development.

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- Ability/willingness to submit all required documentation and plans.
 - Identification of Manufacturer Project Leader and brief qualifications.
 - Willingness to enter into a simple project agreement with APT.
 - Agreement to deliver simple final design specifications to the ALA, CEC, CEE and EPA for dissemination throughout the lighting industry.
 - Statement that fixture lamps will utilize a pin-based configuration and will not accept screw-based lamps.
3. Production and Commercial Availability of Final Product
- Statement of ability to develop and produce commercially available high-end ENERGY STAR qualified fixture.
 - Statement of commitment to specific production and distribution levels. Proposals committing to specific production and distribution levels within California will be viewed favorably.
 - Demonstrate ability to distribute products to California market – percentage of existing sales in California Market must be identified.
 - Identify plans to market final product in the California market – outline channels of distribution (i.e. distributors, showrooms, catalogs, web-sites, etc). Note: demonstrating familiarity with and ability to distribute final product to lighting showrooms will be viewed favorably.
4. Project Cost
- State the total cost that will receive the 50 percent matching reimbursement from this project for design, development, and testing of high end portable lighting fixtures qualifying for the ENERGY STAR program. Detailed budgets with line item costing will be viewed favorably.

SELECTION PROCESS

The TRC consists of five individuals intimately familiar with the lighting industry and the ENERGY STAR program. The TRC is responsible for ranking the proposals. The selection process and criteria for ranking the proposals by the TRC will be based on the following:

- Adherence to Invitation to Participate format and willingness to comply with all requirements.
- Ability to meet or accelerate project timelines.
- Experience with ENERGY STAR qualification process and program.
- Experience and capabilities of producing a high end indoor residential ENERGY STAR lighting fixture.
- Demonstrated familiarity and ability to distribute product into California marketplace.
- Existing market penetration in California.
- Ability to partner with Lighting Show Rooms in California.
- Plans for marketing final product into California marketplace.
- Commitment to production levels.
- Manufacturer cost of design, development and testing.

INTENTION TO PARTICIPATE

Please provide a letter of intention to participate electronically (mikep@appliedproactive.com) or by mail before 5:00pm (EST) March 21, 2003 to:

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Mike Plasski
Applied Proactive Technologies, Inc.
1242 Main Street
Springfield, MA 01103
413-731-6546

QUESTIONS

Questions should be submitted electronically to Mike Plasski by 5:00pm March 28, 2003. Questions will receive written responses on March 31, 2003.

OTHER OPPORTUNITIES

The National Lighting Design Fixture Competition encourages manufacturers to develop, produce, and sell new and innovative energy efficient lighting fixtures (i.e. chandeliers, pendants, sconces) for the residential market. The competition is sponsored by the ALA, the CEE, and the U.S. Department of Energy (DOE), represented by Pacific Northwest National Laboratory (PNNL). For more information, visit www.lightingfortomorrow.com.

The New York State Energy Research and Development Authority (NYSERDA) is sponsoring a program to increase the number of Energy Star-qualified fixtures available through New York State lighting showrooms. The principal goals of the program are to enlist the participation of 3 to 5 manufacturers, and to have each of them manufacture 6 to 10 fixtures to promote through the program. For more information, contact Brad Steele at 508-870-2277 or at bsteele@efi.org.

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Product Specification and Performance Information

This form is intended for use when a manufacturer will not be utilizing the NEMA/ALA lamp and ballast matrices.

By completing this form manufacturers are documenting that they are participating in the ENERGY STAR® Residential Light Fixture Advancement Project, they are applying for 50 percent match funding, and are designing and developing residential lighting fixtures in compliance with version 3.1 of the Residential Light Fixtures ENERGY STAR program. Products will be required to receive ENERGY STAR qualification and approval.

Manufacturer: _____

Fixture Type (table or floor): _____

Fixture Model Number: _____

In the table below, list the lamps and ballasts that will be used in the light fixtures (destined for ENERGY STAR qualification) that are being submitted to the ENERGY STAR® Residential Light Fixture Advancement Project for 50 percent match funding.

	Ballast Manufacturer & Catalog Number*	Lamp Manufacturer & Catalog Number*	#/Lamps/ Fixture	# Ballast/ Fixture	#Lamps / Ballast	Initial Lamp Lumens [1]	Ballast Factor [2]	Total Adjusted Lumens [3]	Input Watts/ System [4]	Input Watts/ Fixture [5]	Efficacy [6]
1	Advance RMB-2P13-S2	OSI CF 13DD/E/830	4	2	2	900	0.95	3420	25	50	68
2											
3											
4											
5											
6											
7											
8											
9											
10											

[1] Initial lamp lumens from lamp matrix

[2] ballast factor from ballast matrix

[3] Equals: (# of ballasts per fixture X # of lamps per ballast X initial lamp lumens) X ballast factor

[4] Input Watts, per lamp-ballast combination from ballast matrix

[5] Equals: (input Watts per lamp-ballast combination X # ballast per fixture)

[6] Equals: total adjusted lamp lumens / total input Watts per fixture

* Record the ballast and lamp that is most often shipped with the fixture on the ENERGY STAR QPI Form.

I (name) _____ an authorized signatory of (Co. name) _____ state that (Co. name) _____ is designing and developing the prototypes and ultimate products in compliance with version 3.1 of the Residential Light Fixtures ENERGY STAR program.

Signature: _____

Name: _____

Title: _____

Date: _____