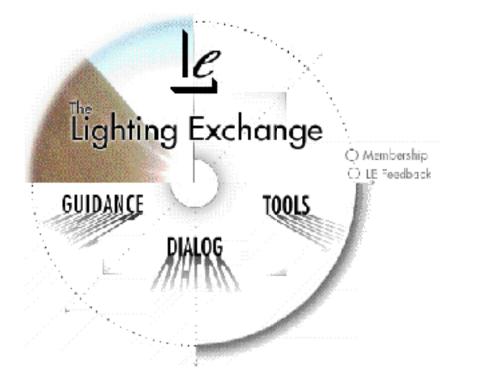
Baseline Market Study Assessing the Potential for Pacific Gas and Electric's Lighting Exchange Program



A Report Prepared for Pacific Gas and Electric Company

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Executive Summary

The Lighting Exchange

In this report we have attempted to assess the market potential for the PG&E's Lighting Exchange. The Lighting Exchange is a set of Internet tools that provide information and analytic capabilities to professionals in the building sector. The goal of the Lighting Exchange is to:

- increase the availability of data related to lighting design
- reduce the amount of effort required of building professionals to obtain the data they need
- increase the range of design and equipment options that are considered
- improve the energy efficiency of commercial buildings

The Exchange is comprised of several tools. The Lighting Exchange Search capability allows users to obtain manufacturer data for lamps, ballasts, controls, and fixtures. In addition, the Lighting Exchange Tools include a retrofit and an economic calculator designed to allow design professionals to evaluate their options.

The Lighting Exchange includes a moderated discussion list, the Lighting Exchange Dialog, which allows users to ask questions and exchange information about equipment and design options and to receive comprehensive and technically correct responses very quickly. The responses are stored in a database which allows users to access the responses to previously asked questions. The database serves as a repository of information about good design practice.

Purpose of the report

This report focuses on the market for the Internet tools which are designed to increase the amount of information and the ease with which building professionals can access information about design options and product availability. The purpose of the Internet tools is to overcome information gaps and barriers that make it difficult for building professionals to implement energy efficiency in new and renovated commercial structures.

The purpose of this document is to describe the market, the target audiences, and the potential for the Internet tools to penetrate the market. In addition, PG&E wishes to establish a market baseline so that it can track the penetration of the tools and assess the effects of the tools in the market place. This report attempts to identify:

- The target audiences, particularly the types, number and characteristics of actors interested in this program
- The functions of the Lighting Exchange Program

- Barriers to the introduction of this program
- The potential for this program to be adopted in the market
- The potential for this program to influence the market
- Market effects measures that will allow changes in the use of this program to be tracked in the future

How the data were collected

This study is based on interviews with PG&E staff, 30 in-depth one-to-one interviews with building professionals lasting between 30 minutes and an hour and a half, and a telephone survey of 201 randomly selected building professionals in Northern California. The telephone interviews lasted from 15 minutes to 40 minutes or more.

Key findings about the market

Internet use is substantial in the building professions with 85 percent of respondents saying they use the Internet for work related purposes.

If non-Internet users carry through with their intentions to become Internet users, more than 96 percent of the target audiences will be Internet users within two years.

Based on these data, we conclude that access to the Internet is not a barrier to the potential use of the Lighting Exchange. A further implication of this is that the PEC can focus on creating awareness of the tools and training users on them rather than focusing on general Internet training.

High percentages of the target audiences say they access product information (89 percent) and visit manufacturer sites (86 percent) when they use the Internet.

However, only about 15 percent say that they participate in discussion groups. Discussion groups are an analog of the Lighting Exchange Dialog.

The fact that the market audience already searches for product information and visits manufacturer sites bodes well for the success of the Lighting Exchange search tools. The lack of use of discussion groups suggests that the PG&E may have to market the Dialog fairly heavily. It is clear from other studies that marketing will be essential in order for the Lighting Exchange to be successful.

The target audience is highly aware of the PEC Internet site and about 21 percent of the target audience has visited the site. Seventy percent of those who have visited the PEC Internet site have visited four times or more.

Thus, PG&E already has some presence on the Internet upon which it can build.

About ten percent of the target population has used the inter.Light search site. The inter.Light site is a product referral site that is directly analogous to the Lighting

Exchange Search Tool site. The Lighting Exchange Toll will compete directly with the inter.Light site. However, this site does not provide product data as the Lighting Exchange will.

There are differences by profession in who is aware of the two sites and who uses them. Energy consultants are most likely to be aware of and use the PEC site. Architects are least likely to use the PEC site.

After examining the data concerning market preferences related to the Lighting Exchange, we concluded that:

- Eighty percent or more of the respondents are interested in concepts that are embodied in the Lighting Exchange search tools and the Lighting Exchange Dialog.
- There is slightly greater interest in the product search tools than in the Dialog.
- This difference in interest is consistent with the revealed preferences with respect to the types of materials that users currently seek on the Internet.

Thus, we conclude that the target audiences are strongly predisposed to use the Lighting Exchange. These predispositions are supported by the target audience's stated motivations for using the Lighting Exchange.

The key stated motivations for using the dialog are to:

- Obtain general information, technical data, and insight into trends in the field.
- Get alternative solutions and diverse feedback from experts.

The key motivations for using the product search tools are to:

- Reduce the time and effort expended for information searches from current levels.
- Perform searches yielding a greater number of options for the same or nearly the same level of effort.
- Use searches to research significantly different alternatives that might lead to better designs.

These findings indicate people perceive that these tools will provide benefits. We believe that the product search tools have the potential to become an extremely important resource in the building professions. The Dialog is also likely to meet with success but perhaps less quickly.

These products will need to be marketed to building professionals before they will become widely used.

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