# Energy Ideas Clearinghouse Market Progress Evaluation Report, No. 5

prepared by Quantec, LLC

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**Final Report** 

# Energy Ideas Clearinghouse Market Progress Evaluation Report

**Prepared for**: Northwest Energy Efficiency Alliance

> Prepared by: Quantec, LLC

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Since 1990, the Energy Ideas Clearinghouse (EIC or Clearinghouse) has served energy professionals in the Pacific Northwest by providing fast, centralized access to comprehensive and objective information and technical assistance on energy-related topics.

Northwest utilities have been the EIC's primary target audience over the last two years, with the goal of educating utility staff regarding energy efficiency information that they can then share with their customers. EIC technical services are also available for energy professionals from commercial and industrial customers served by Northwest utilities.

# **Program Characterization**

The Clearinghouse currently offers three primary services: a hotline, a Web site, and several energy listservs. Customers served by utilities in the Pacific Northwest can call (toll free), email, or fax questions concerning energy use to the Clearinghouse hotline. The Web site offers energy efficiency information, energy links, job postings, and a calendar of energy events. The EIC currently manages 14 active listservs that play an important role in facilitating communication between members of the energy efficiency community, and they serve to disseminate information about the latest energy-efficiency technologies. In 2003 the EIC also initiated the Product and Technology Review (PTR), where EIC technical staff will conduct research into new products or technologies, producing factsheets for Northwest utilities.

# Market Progress Evaluation Report Goals and Objectives

This report examines a number of items, including:<sup>1</sup>

- Two key progress indicators: increased use of the EIC by targeted audiences and utility satisfaction with the EIC services.
- The success of the EIC in implementing recommendations from a marketing consultant to promote their services to utilities.
- The information quality of the EIC services
- The EIC monitoring and tracking procedures
- The implementation of recommendations from previous MPERs

<sup>&</sup>lt;sup>1</sup> This report was also supposed to review the results of a Web site usability study, but this study was not initiated at the time of this evaluation.

#### Web Site Usage Profiles

Use of the EnergyIdeas.org Web page has grown dramatically over the past few years. In 1998, for example, the site averaged 1,170 user sessions per month; in 1999 user sessions nearly doubled to 2,000 per month, and by 2002 the EnergyIdeas.org Web site was receiving an average of 20,763 visits per month (Figure ES.1). This is an average of 669 user sessions *per day* in 2002, far surpassing the use of the hotline, which only registered 661 inquiries during the *entire year*. The dissemination of information via the Web is consistent with the "inverted pyramid" goal of the EIC, to serve the majority of clients via lower-cost, electronic media and only forward the most technical and unique questions to the library or engineers.

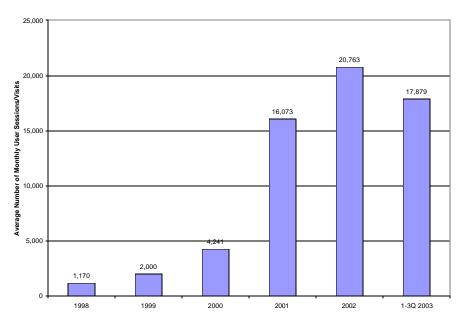


Figure ES.1 Average Number of EIC Web Monthly User Sessions/Visitors

While the EIC has collected detailed information about the business sector and location for the hotline users, little information was known about Web site visitors. The EIC designed and implemented a user registration page in Spring 2003 to collect basic information about Web site visitors. The registration page, however, turned away many potential users of the site. The first two versions of the registration page were mandatory, and only 26% completed the page. When the page was made optional only 11% registered, and some users still may have exited the page. Based on those that did register, utility users represent 10.5% of Web page users, second behind consulting firms (13.3%).

#### **Case Management Database Usage Profiles**

The EIC Case Management Database (CMD) includes inquiries from both the telephone hotline and email/Web inquiries. In the first three quarters of 2003, there were a total of 507 CMD inquiries, 41% of which came from utilities, compared to only 25% in 2002. The average number of utility inquiries from 1999-2002 was 169 per year; in the first three quarters of 2003, however, there have already been 210 utility inquiries. In particular, utility inquiries increased markedly in April 2003, just after the March 24-31 mailing of a utility "reference packet."

The marketing campaign in 2003 also appeared to have an impact in attracting new utility users: first time utility callers increased from 36% in 1999-2002 to 56% in the first three quarters of 2003.

#### **Survey of Utility Professionals**

Quantec conducted a survey of Northwest utility staff to assess how utility employees responded to the EIC marketing campaign, new Web page, and new services. The sample was drawn from the CMD database, an Alliance utility contact list, and from respondents to an online utility needs assessment survey conducted in 2002. The responses to the new Web page were mixed: of the 35 respondents who discussed changes to the page in the last year, 17 commented that they liked the new navigation and content. Eleven respondents, however, found the new navigation to be more cumbersome and difficult to use than the previous design.

Respondents who had received information from the Product and Technology Review service were pleased with the information they received. Respondents reported that the information they received was complete, objective, and an excellent resource.

Finally, a total of 62% of all respondents recalled receiving at least one EIC marketing piece during the last six months. Moreover, awareness of the EIC is correlated with usage: 82% of those that received information responded that they had used the EIC, compared to only 54% of the respondents that did not recall receiving marketing materials.

### **Recent Marketing Initiatives**

This report also reviews the marketing activities initiated by the EIC and assesses how closely the campaign followed the recommendations of the marketing consultant. The EIC implemented many of the approaches suggested by the marketing consultant, using a mix of personal communication (appearances at conferences and presentations) and non-personal communications (direct mailings).

In reviewing where the EIC followed the consultant's recommendations for marketing copy, and where the EIC chose to use its own language, it appears that the EIC is hesitant to use words that tout its own capabilities. We certainly recognize the sensitivities about appearing to boast, but as this and previous MPERs indicate, the EIC has a long track record of providing quality information, high customer satisfaction, and fast service – all free of charge to the user.

We therefore encourage the EIC to revisit the marketing consultant's report and begin consistently using more of the recommended key words in the marketing materials that tout the organization's capabilities and expertise. In addition, the EIC should make efforts to more consistently promote both its mission statement and its market position.

#### **Information Quality Review**

In an effort to validate the quality of the information that the EIC is providing to customers, Quantec submitted a number of inquiries to the EIC via the telephone hotline and Web page.

We found the information provided in some cases to be exceptionally helpful and unique. Nearly half of the responses (nine of the 19) received very good/excellent ratings (an average rating across all four categories of 4.0 or higher). These responses were very thorough, reflected strong technical expertise, and provided references to high quality, directly relevant references. Over a third of the responses (seven) were considered of average quality, where the information was somewhat helpful.

However, three of the responses were of lesser quality, due in part to priorities that the EIC had established to deal with their funding concerns. In the interest of improving service overall, it is probably worth examining these priorities and then communicating them more prominently to potential users of the services so that user frustration is minimized.

### **Development of Usage Reports**

In an effort to clarify tracking trends for the EIC and the Alliance, Quantec has prepared numerous examples of tables and charts. Some of these program metrics should be tracked quarterly or annually by the EIC, other tables and research, however, may need to be conducted by a third-party evaluator.

# **Conclusions and Recommendations**

This evaluation reveals that the EIC continues to achieve a number of the market transformation goals of Alliance funding. Awareness surrounding how energy is used, and the associated energy and non-energy benefits of energy

efficiency, continues to increase as measured by increases in overall EIC users, the ease of acquiring information, and the satisfaction among EIC users.

Other key findings include:

- Use of the EIC increased among utility professionals in 2003. Additional suggestions from the marketing consultant need to be implemented. The EIC needs to continually monitor the use of its services to determine if the increase in use by utility professionals is sustained. The EIC should begin using more key words in the marketing materials and promoting their mission statement and marketing position on their materials.
- The number of EIC users served continues to increase dramatically. The EIC should consider tracking awareness and usage of EIC among identified target audiences (both users and nonusers). EIC should also conduct ongoing tracking to see how the information provided is used in the energy decision-making process.
- *Satisfaction among utility users remains high*. The EIC should develop an ongoing tracking system (i.e., an ongoing "dialogue" with customers") to continually evaluate satisfaction among all users.
- The Product and Technology Review (PTR) is a popular new service for utility professionals. The PTR factsheets should not be limited to utility professionals and should be made available to others working in energy efficiency. The factsheets should be made more readily available by posting on the Web page.
- Although the EIC incorporated many of the recommended changes from both a usability study and an expert review to the Web page, reactions to the new site were mixed. The EIC should conduct a follow-up usability study. The EIC should also establish a feedback system to continually monitor satisfaction with the Web site.
- The quality of information services provided by the EIC can be quite good, but priorities differed based on business type and location. In the interest of improving service overall, it is probably worth examining caller priorities and then communicating them more prominently to potential users of the services so that user frustration is minimized.
- The EIC and the Alliance should review the reporting procedures and consider developing new reports that address the information needs of both organizations.

Since 1990, the Energy Ideas Clearinghouse (EIC or Clearinghouse) has served energy professionals in the Pacific Northwest by providing fast, centralized access to comprehensive and objective information and technical assistance on energy-related topics.

The Clearinghouse was originally funded by Bonneville Power Administration (BPA), which saw the need for a centralized source of energyrelated information as it entered the commercial and industrial demand-side management arena.

In 1997, the Northwest Energy Efficiency Alliance (the Alliance) began funding the program in support of its market transformation efforts. Alliance funding was predicated upon having the Clearinghouse target its informational services to decrease at least two market barriers limiting the adoption of energy-efficient practices:

- Lack of awareness concerning how energy is used and the associated energy and non-energy benefits of energy efficiency
- Search and acquisition costs of information on energy efficiency practices

Northwest utilities have been the EIC's primary target audience over the last two years, with the goal of educating utility staff regarding energy efficient information that they can then share with the customers. EIC technical services are also available for energy professionals from commercial and industrial customers served by Northwest utilities.

The EIC is currently managed by the Washington State University Cooperative Extension Energy Program (WSUEP), which conducts research, develops tools, and disseminates information that people need to make informed decisions about energy.

# **Program Characterization**

The Clearinghouse currently offers three primary services: a hotline, a Web site, and several energy listservs. Each of these is discussed below.

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#### **EIC Hotline**

Customers served by utilities in the Pacific Northwest can call (toll free), email, or fax questions concerning energy use to the Clearinghouse hotline.<sup>2</sup> Topics that have been addressed include (but are not limited to) motor systems, HVAC, industrial technologies, life cycle cost analysis, computer simulation, energy policy, agricultural energy issues, and cogeneration. EIC staff generally respond to inquiries within eight working hours. Responses may include:

- *Results of literature search*: When combined with WSU resources, the Clearinghouse library is the largest energy library in the Northwest and includes product literature and reviews, articles, reports, and energy-related publications.
- *Publication or fact sheet*: The Clearinghouse has prepared fact sheets on a range of energy topics, including building commissioning, energy-efficient motors, and geothermal heat pumps.
- *Product or pricing information*: The Clearinghouse will sometimes provide specific product or pricing information to callers.
- **Product and technology review (PTR).** Upon request, the technical staff of the EIC and the Lighting Design Lab will review a product or technology. The reviewer will contact the manufacturer, collect secondary research, identify independent testing results, and summarize the information in a standard "Review Factsheet" that is available to all Northwest utilities.
- *Engineering assistance or analysis*: The Clearinghouse has nine engineers prepared to answer technical questions that cannot be answered by the EnergyIdeas.org Web site, customer service representatives, the librarian, or the fact sheets.
- **Referrals to other energy programs, services, or resources**: The Clearinghouse maintains a comprehensive collection of information on other programs, services, and resources. In addition, the Clearinghouse is also now answering inquiries and referring callers to other Alliance programs.

### EnergyIdeas.org Web Site

The Web site offers a number of services, including:

• Energy-related job listings

<sup>&</sup>lt;sup>2</sup> Inquiries from outside the region were sometimes responded to if they were related to the Pacific Northwest or came in from the Web site.

- A calendar to search for energy conferences, meetings, or upcoming events
- Links to energy software, publications, and tools for energy professionals
- Links to newsgroups and current news about energy efficiency nationwide
- Links to other Web sites with energy information
- An Energy Solutions Database (ESD) with energy efficiency information

The Web site underwent a major redesign in January 2003. The new site was designed based on feedback from the usability studies in 2002 and incorporates a new navigation scheme and search features.

## Listservs

The EIC currently manages 14 active listservs.<sup>3</sup> These email "forums" play an important role in facilitating communication between members of the energy efficiency community, and they serve to disseminate information about the latest energy-efficiency technologies. The listservs include forums for the American Institute of Architects, the Alliance, those with an interest in agricultural energy issues, and many others.<sup>4</sup>

# **Staffing and Funding**

The EIC currently operates with a total of 4.57 full time equivalent (FTE) positions. The work is divided into specific task areas, including:

- Management (0.74)
- Marketing (0.12)
- Listservs (0.37)
- Web design, maintenance, and content (0.8)
- Customer Service (0.8)
- Technical Assistance (Includes library and technical staff, 1.56)
- Evaluation (0.09)
- Product and Technology Review (0.09)

<sup>&</sup>lt;sup>3</sup> The EIC also maintains lists of previous listservs that are currently inactive but may resume activity in the future.

<sup>&</sup>lt;sup>4</sup> The full directory of EIC listservs, including number of subscribers, is included in Appendix A.

The total budget for the EIC is \$560,000, of which \$470,000 (84%) comes from the Alliance, and \$90,000 (16%) is provided by the WSU Energy Program. As shown in Figure I.1, the EIC budget (Alliance and WSU Energy Program combined) comprises 35% of the total WSU Clearinghouse Services annual funding.

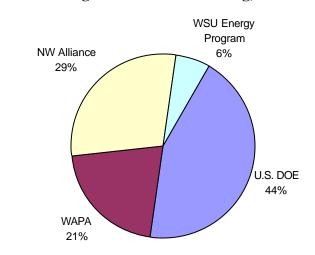


Figure I.1: WSU Clearinghouse Services Funding, 2003-2004

# **MPER Goals and Objectives**

This is the fifth Market Progress Evaluation Report that Quantec has conducted for the EIC, and examines data through the third quarter of 2003. As shown in Table I.1, the Alliance and Quantec have defined a number of progress indicators and metrics to examine the impact of EIC efforts.

Month	Activity
Increased awareness and	<ul> <li>Number of EIC users served by targeted audiences</li> </ul>
use of EIC by energy professionals	<ul> <li>Time series surveys of general energy decision makers to see if they are aware of EIC</li> </ul>
	<ul> <li>Surveys of users and suppliers to examine ease of accessing information and the perceived cost of getting information</li> </ul>
Use of efficiency	Time series surveys of EIC users and general energy decision makers
information services by	to examine increased awareness and use of energy as an
energy professionals	input/component cost (e.g., surveys of EIC users asking "how did you use the information" or "was it an important factor in the decision process?")
Satisfaction with EIC	Survey of EIC users to test satisfaction and use of information
services	

Table I.1:Progress Indicators and Associated Metrics

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Previous EIC Market Progress Evaluation Reports (MPERs) included a vast array of data collection and analysis efforts to examine these indicators, including interviews with EIC staff, surveys of EIC users and nonusers, Web site surveys and usability studies, a Web site benchmarking study, and surveys of listserv participants (Table I.2).

Research Effort	MPER1 (Dec 1999)	MPER2 (Aug 2000)	MPER3 (Jun 2001)	MPER4 (Jan 2003)
Onsite interviews with EIC staff	✓	✓		
Analysis of Case Management Database	✓	$\checkmark$	$\checkmark$	✓
Surveys with hotline current users	$\checkmark$	$\checkmark$		
Surveys with hotline prior users	$\checkmark$			
Surveys with nonusers	$\checkmark$	$\checkmark$		
Web site benchmarking	✓		$\checkmark$	
Analysis of Web statistics	✓	$\checkmark$		
Web usability study	$\checkmark$			$\checkmark$
Review of marketing plan				$\checkmark$
Online survey for Web users		$\checkmark$	$\checkmark$	
Online survey of listserv recipients			$\checkmark$	
Surveys for utility needs assessment				$\checkmark$

Table I.2:Previous Research Efforts

As requested by the Alliance, this report continues to examine a number of the indicators (e.g., increased use of the EIC by targeted audiences and satisfaction with the EIC services). It also evaluates the success of the EIC in implementing recommendations from a marketing consultant to promote their services to utilities. With this goal in mind, this report seeks to answer a number of questions, including:

- 1. Were the recommended actions taken, implemented appropriately and in a timely way? If not, why (what barriers exist, how can they be overcome)?
- 2. What was the impact of these efforts on the EIC's operations and services, and on the core target user group?
  - Do the utilities see the new EIC marketing materials/messages as a clear and focused description of who the EIC is, what it does, and its intended primary audience?
  - Do the revised EIC marketing materials attract new and repeat users from the target market?

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- Was there an increase in (new and repeat) use of EIC services among the regional utilities in terms of inquiries and/or use of the Web page? If so, who and on what topics?
- Were utility users more likely to make more use of the information they requested, and/or share it with customers, than in the past? Why?
- How did the utility customers use the EIC? What type of information did they request?

The Alliance also requested that this report address two additional issues:

- 3. Is the EIC producing quality information that its customers can make use of?
- 4. Are the EIC reports providing adequate information for an ongoing assessment of program performance? Are there areas for improvement?

In an effort to answer these questions, this report summarizes an extensive amount of research, including:  $^5$ 

- Updated statistics about services, use, staffing, funding, and marketing efforts for the Clearinghouse
- An updated profile of utility activity from the EIC Case Management Database
- An initial profile of the users of EnergyIdeas.org based on 3,826 Web site registrations
- An online survey of 312 utility professionals to examine awareness and use of the EIC
- A "mystery shopper" study to evaluate EIC data quality

# **Structure of This Report**

This chapter serves as an introduction to the activities of the EIC and the goals and objectives of this report. Chapter II examines use of the Web site, the dominant medium in which the EIC is currently providing technical assistance. Chapter III examines the Case Management Database to evaluate general trends in the number of users served and look for responses to the marketing activities. Chapter IV presents results from a survey of utility professionals, in which the study examined satisfaction with the EIC services and looked for further evidence of a response to the utility marketing campaign. Chapter V examines, in more detail, the EIC marketing initiatives, assessing how closely the EIC followed the recommendations of the

<sup>&</sup>lt;sup>5</sup> This report was also supposed to review the results of a Web site usability study, but this study was not initiated at the time of this evaluation.

marketing consultant and summarizing some outcomes from previous sections of the report.

In Chapter VI we present the results of "mystery shopper" research to evaluate EIC data quality. Chapter VII reviews current EIC reporting and provides suggestions for usage reports that will serve the needs of both the EIC and the Alliance. Finally, Chapter VIII presents our conclusions and recommendations.

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The move towards electronic retrieval of information has led to extraordinary increases in the use of the EIC Web page. In order to better understand who is using the Web page – including an assessment of site use by utility professionals in response to the marketing campaign – Quantec worked with the EIC to develop a tracking system of Web page users.

# **Volume of Inquiries**

Use of the EnergyIdeas.org Web page has grown dramatically over the past few years. In 1998, for example, the site averaged 1,170 user sessions per month; in 1999 user sessions nearly doubled to 2,000 per month, and by 2002 the site was receiving an average of 20,763 visits per month (Table II.1).<sup>6</sup> This is an average of 669 user sessions *per day* in 2002, far surpassing the use of the hotline, which only registered 661 inquiries during the *entire year*. The dissemination of information via the Web is consistent with the "inverted pyramid" goal of the EIC, to serve the majority of clients via lower-cost, electronic media and only forward the most technical and unique questions to the library or engineers.

As shown in Figure II.1, use varied dramatically each month, and these monthly activity levels were usually tied to EIC marketing activities. For example, the February 2003 "spike" resulted from the postcard announcement of the new launch of the Web site.

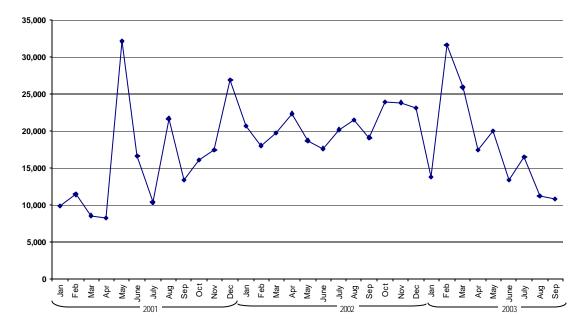
Table II.1:					
Additional Web Site Statistics					

	1998	1999	2000	2001	2002	1-3Q 2003
Average Number of Monthly User Sessions/Visits	1,170	2,000	4,241	16,073	20,763	17,879
Average Number of Unique Users/Visits per month <sup>7</sup>	NA	309	843	NA	NA	7,154

<sup>&</sup>lt;sup>6</sup> A user session (or visit) is defined as a session of activity (all hits) for one user of a Web site. A unique visit is the number of visits in a specific time period from a unique IP Address. Note that users that chose not to register in 2003 are included in these figures. In addition, the 2001-2003 figures are based on the use of Surfstats, which counts the session as a new visit if the user resumes activity after 30 minutes of inactivity; Webtrends, the previous software, registered the visit as a new user session after resuming activity after only 15 minutes of inactivity. Surfstats also filters for "spiders" and "crawlers," whereas Webtrends counted them as user sessions.

<sup>&</sup>lt;sup>7</sup> The same user may have different IP addresses each time they log in, depending on their Internet Service Provider, so the number of unique users/visits is likely inflated, but there is no way to estimate the magnitude of this bias.

Figure II.1: Total Web Site Visits<sup>8</sup>



# Learning about Web Page Users

While the EIC had collected detailed information about the business sector and location of hotline callers, little information was known about the Web users until the implementation of the registration page in April, 2003. Although IP addresses provided potential insight into the identity of the Web users, an analysis of the 2001 Energy Solutions Database Web log found several limitations to this approach, including:<sup>9</sup>

- Each IP address had to be manually looked up using the American Registry for Internet Numbers' (ARINs) "Whois" program
- Many lookups provided only the name of an Internet Service Provider (ISP), thus telling us little about the user
- IP addresses are assigned dynamically, thus many individuals may query the database from several different IP addresses over the course of a year (therefore estimates of the repeat use of the Web by single users are underestimated)

<sup>&</sup>lt;sup>8</sup> Provided by EIC. Includes all user and international sessions.

<sup>&</sup>lt;sup>9</sup> Link, Lee, and Lynn Oha-Carey. "Learning from Clients' Searches of the Energy Solutions Database: A Preliminary Analysis." Washington State University Cooperative Extension Energy Program, April 2002.

The EIC designed and implemented a user registration page in Spring 2003 to collect basic information about the Web page users.<sup>10</sup> The goals of this data collection effort included:

- Evaluating if targeted audiences, such as utility professionals from the Northwest, were using the Web page
- Evaluating the success of marketing efforts by seeing how users learned about the page
- Collecting email addresses for the EIC listservs

### Implementation

Based on our understanding of the data needs, Quantec recommended that the registration page request four pieces of information:

- Email address
- State
- Company type
- Method from which user learned of the EIC

The suggested registration page also included a checkbox to allow registrants the option of signing up for Energy Newsbriefs. This offered EIC the possibility of expanding communication efforts with interested parties.

In order to make the page less intrusive, registration was only to be required once, and no passwords were required. In the event that a user did not have "cookies" enabled in their Web browser, had deleted their "cookies," or was using another computer, the user could simply enter in their email address to bypass the registration page.

In an additional step to encourage registration, the page attempted to follow a registration "best practice" and highlight the value of the EIC Web site, making the benefits of registration clear to the user.<sup>11</sup>

Quantec also suggested that all fields be required for a preliminary period to determine the impact of registration on site traffic. In addition, we requested that the "action-basis" for the registration page be carefully reviewed so that the EIC could record a majority of users without discouraging new users. For example, registration could be required when the user actually requested information or tried to search the database.

<sup>&</sup>lt;sup>10</sup> Earlier evaluations had attempted to use an online survey to learn about users, but only attained a response rate of 3% despite entering all survey respondents into a drawing for various prizes.

<sup>&</sup>lt;sup>11</sup> Change Sciences Group. "Online Registration Best Practices." www.changesciences.com.

The EIC launched the first version of the registration page on April 14, 2003. The original page required that the user enter and confirm an email address. In addition, because of technical limitations, the registration page was required to appear when the user attempted to access any page other than the home page. This meant that when a user linked to any page – including introductory pages such as "about the EIC," "site map," or "about us" – the registration appeared. In addition, when a user followed a link from another site to any EIC page other than the home page, the registration would appear.

During the first two weeks of registration, the EIC staff had concerns that a high number of users may be refusing to register because of the requirement to confirm the email address, so the registration page was modified again on April 30, 2003. To make the registration appear less intrusive, the email field was highlighted as optional.

The EIC staff continued to have concerns that interested users were not registering, thus being denied access to the Web site information. With approval from the Alliance, the EIC released a third version of the registration page on July 9, 2003, this time eliminating the email field altogether. Users were also offered the option of bypassing the registration and entering the site. The final registration page is displayed in Figure II.2.

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#### Figure II.2: Third and Final Registration Page (Uploaded July 9, 2003)

## **Results**

#### **Number of Registrations**

As shown in Table II.2, 18% of the unique IP addresses that accessed the original registration page actually registered; 82% of those that accessed the registration, therefore, chose to skip the page and not access the EnergyIdeas.org site. For the second registration page, where the email field was optional, 27% of the unique IP addresses that accessed the registration page chose to complete the form. While this was an improvement, it still meant that nearly three out of four potential users were being deterred by the registration page and not entering the Web site.

Making the entire registration optional after July 9, 2003, led to a sharp drop in registrations: only 11% of the unique IP addresses chose to register. The average number of registrations per day, which had increased from 17 to 44 after making the email optional, dropped to only 11 a day after the entire registration page was optional. The majority of users, when given the option, have now chosen not to register for the site.<sup>12</sup>

Description	Requested Email Confirmation, All Fields Required	Email Optional, No Email Confirmation	Email not Requested, Registration Optional
Date of modification	April 14 - 30, 2003	May 1 - July 8, 2003	July 9 - August 5, 2003*
Registrations Obtained During Period	504	3021	301
Unique IP Addresses Accessing Registration Page	2,811	11,009	2,664
Percent of Unique IP Addresses Who Registered	18%	27%	11%
Average Number of Registrations per Day	17	44	11

 Table II.2:

 Comparisons Among Versions of Registration Page

The third registration page remained active at the time of this report in September 2003. Data were only available through August 5, 2003.

We believe that a number of factors contributed to the apparently low response rate for the registration page.<sup>13</sup> Perhaps most importantly, the registration page appeared quite early in the process of using the Web site. For example, first-time users that attempted to even read the "about us" or "site

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<sup>&</sup>lt;sup>12</sup> The EIC, however, was unable to track how many of these IP addresses continued to the site after receiving the registration page and how many chose to exit the site altogether. We have assumed that most have bypassed the registration and continued to the site.

<sup>&</sup>lt;sup>13</sup> While these registration rates seem low, they may not be when measured against other information services sites. A preliminary publication search did not yield data on registration rates. If the Alliance or EIC perceives that this is an issue, we would recommend further research into this matter in the future.

map" pages were asked to register. Even clicking on the "search" feature brought up the registration page.

If users were allowed to review at least some parts of the site to find relevant information and only prompted to register once they attempted to download a document, they would be more likely to provide the requested information for two reasons: the user has made a time investment by navigating the site to find something of interest and the user can safely assume they will be immediately compensated for their registration in the form of a fulfilled data request.

Ultimately, the placement of the registration page was decided based on implementation time and budget. Having the registration page appear immediately following the home page, regardless of the hyperlink selected, required less development time. Implementing a solution based on the user selecting a link that invokes a document download is more technically involved. Therefore, the registration page was presented to every user at the moment they selected any link from the EIC home page.

This deterrent may have been intensified by the fact that the first two versions of the registration page did not make the benefits of registering clear to the user. The first-time user, who possibly knew little about the EnergyIdeas.org site, was asked to register without fully understanding the benefits of the information that was available. Text explaining the value of the site was not added until the third version of the registration page, at which time registering became optional.

### **User Profiles**

The following chart and tables provide information obtained from the registration page from April 14 – August 5, 2003. Points of interest include:

- As shown in Figure II.3, utility professionals (10.5%) represented the second largest business sector using the Web page, behind consulting firms (13.3%). Other highly represented sectors included education and government (9.8% and 9.5%, respectively). In addition, 7.7% of the registrants were individuals contacting the EIC about personal energy efficiency information. Many respondents (22.5%) selected "other" for business type; given the extensive list they may have chosen not to provide their business type.
- Nearly 24% of registrants are employed in the Northwest (Idaho, Montana, Oregon, or Washington) and 7.8% from California (Table IV.2).
- Most of the registrants (94.5%) are from the United States, with Canada (2.8%), Australia (1.1%), Mexico (1.0%), and the U.K. (0.7%) also represented (Table II.3).

- Forty-seven percent of registrant's learned of the EIC by performing a Web search, with another 30% being directed to EnergyIdeas.com by following a link on another Web page (Table IV.4)
- More than 75% of users perhaps fearing "junk" email chose not to provide their email address during registration (Table IV.6).

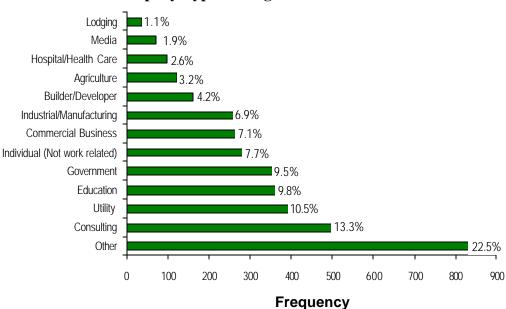


Figure II.3: Company Type for Registered Users

tate of Employment For Registered Users						
Location	Frequency	Percent				
Idaho	79	2.1%				
Montana	38	1.0%				
Oregon	271	7.1%				
Washington	527	13.8%				
California	297	7.8%				
Other U.S.	2,402	62.8%				
Foreign	212	5.5%				

 Table II.3:

 State of Employment For Registered Users

Country	Frequency	Percent
USA	3,614	94.5%
Canada	106	2.8%
Australia	43	1.1%
Mexico	38	1.0%
U.K.	25	0.7%

# Table II.4:Country of Registered Users

# Table II.5:Referral Source for Registered Users

Method	Frequency	Percent
Web search	1,799	47.0%
Link on another Web page	1,153	30.1%
Other	394	10.3%
Word of mouth	308	8.1%
Ad in journal/magazine/newsletter	72	1.9%
Energyldeas booth/presentation at conference	53	1.4%
Energyldeas mailing	47	1.2%

Table II.6:Provided Email Addresses

Version of	Provided Email	Did Not
Registration Page	Address	Provide Email
Version 1 – Email Required	502	NA
Version 2 – Email Optional	505	2,518
Version 3 – Registration Optional	NA	301

# **Summary of Findings**

*Web use continues to far surpass hotline use*. The EIC Web site received more average visitors *per day* in 2002 (669) than inquiries to the hotline during the *entire year* (661).

*The registration page, as implemented, turned away many potential users of the site.* Less than 25% of the Web page users completed the registration page in 2003, and many potential users exited the site when asked to register. Adding a "bypass" screen to the registration page most likely reduced the number of users that exited the site, but registration has dropped to 11%.

**Based on those that did register, utility users represent 10.5% of Web page** *users, second behind consulting firms (13.3%).* Twenty-two percent of those that registered, however, chose not to provide their company type, so there is a potential nonresponse bias.

# • quantec

# III. Utility Case Management Database Usage Profiles

The EIC Case Management Database (CMD) includes inquiries from both the telephone hotline and email/Web inquiries. Quantec assessed the impacts of the utility marketing campaign by carefully examining the CMD for differences in utility use in the first three quarters of 2003 compared to previous years.

# **Profile from Case Management Database**

### **Volume of Inquiries**

As shown in Table III.1, the average number of utility inquiries from 1999-2002 was 169 per year (or 22% of all inquiries). In the first three quarters of 2003, however, there was a sharp rise in utility inquiries (210) to 41% of all inquiries.

In particular, utility inquiries increased markedly in April 2003, just after the March 24-31 mailing of a utility "reference packet" (Figure III.1). The reference packet contained sample factsheets, reports of hotline requests, a PTR Overview, marketing collateral, switchplate stickers, notepads, and a new brochure in a branded folder.

		Inquiries <sup>1</sup>		Clients <sup>2</sup>			
Year	Total	Percent Northwest	Percent Utility	Total	Percent Northwest	Percent Utility	
1999 <sup>3</sup>	657	93%	20%	473	91%	16%	
20004	763	87%	19%	539	83%	14%	
2001	1,055	94%	22%	777	92%	17%	
2002	661	94%	25%	456	91%	19%	
1-3Q 2003	507	96%	41%	348	96%	33%`	
Total	3,643	93%	24%	2,593	90%	19%	

Table III.1:
<b>Volume of EIC Hotline Inquiries and Clients</b>

Notes:

 Inquiries refer to the number of requests for information. Much of the 2000 and 2001 volume increases were likely due to the electricity crisis in the western U.S., and thus the apparent decreases in 2002 and 2003 could reflect the passing of this crisis

2) Clients refer to the number of unique callers who made one or more inquires.

3) Approximately 85 inquiries in 1999 concerning a cooperative project with the Consortium for Energy Efficiency on the procurement tool kit are not included in this table or in the analysis.

4) 2000 data includes 24 inquiries from Energy User News and Home Energy ads (reader response cards) and 24 EREC inquiries that were reviewed and responded to by EIC.

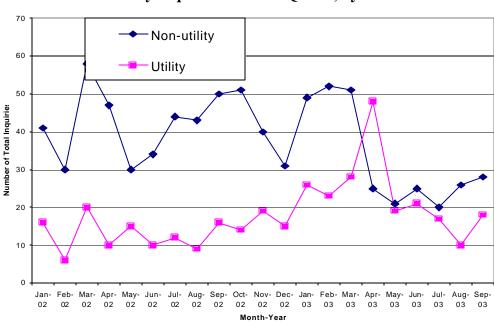


Figure III.1: Utility Inquiries in 2002-3Q 2003, by Month

Examining the years from 1999 through the 3<sup>rd</sup> quarter of 2003, an average of 24% of the inquiries came from utilities, the largest single identified user sector (Table III.2). Other important sectors included consultants (architects/engineering firms/ESCOs, 17% of the inquiries), government (14%), education (8%), and individuals (not calling from work, 8%).

Company Type	1999 – 3Q 2003				
company type	No. Inquiries	Percent			
Utility	885	24%			
Consulting (Arch/Eng/ESCO)	615	17%			
Government (City/State/County)	516	14%			
Education	296	8%			
Individual	289	8%			
Commercial Business	235	6%			
Other	168	5%			
NEEA	139	4%			
Industrial/Manufacturing	108	3%			
Builder/Developer	103	3%			
Agriculture	62	2%			
Government (Federal)	57	2%			
Media	54	1%			
Missing	40	1%			
Lodging (Apt/Hotel/Condo)	30	1%			
Professional Association	29	1%			
Hospital/Health Care	17	<1%			
Total	3,643	100%			

Table III.2:Type of Company Using EIC Services

Approximately two-thirds (65%) of the 885 utility clients over this time period worked at large utilities with over 30,000 customers, while only 8% worked at smaller utilities (Table III.3). In addition, 445 (50%) of the inquiries came from utilities with service territories only west of the Cascades, while 311 (35%) came from utilities with service territories only east of the Cascades. Finally, 18 utility inquiries (2%) were entered into the 1999-2003 Case Management Database despite coming from outside of the Northwest service area.

	U	U	,	•		
	Total		1999-2002		1-3Q 2003	
Utility Size	No. Inquiries	Percent	No. Inquiries	Percent	No. Inquiries	Percent
Small (< 10,000 customers)	71	8%	50	7%	21	10%
Medium (10,000-30,000 customers)	194	22%	163	24%	31	15%
Large (> 30,000 customers)	576	65%	427	63%	149	71%
Not available	44	5%	35	5%	9	4%
Total	885	100%	675	100%	210	100%

Table III.3:EIC Utility Clients by Size, 1999 – 3Q2003

	Total		1999 <sup>.</sup>	-2002	1-3Q 2003	
Utility Service Territory	No. Inquiries	Percent	No. Inquiries	Percent	No. Inquiries	Percent
Eastern	311	35%	257	38%	54	26%
Western	445	50%	322	48%	123	59%
East and West*	85	10%	61	9%	24	11%
Outside Pacific Northwest	18	2%	14	2%	4	2%
Not Available	26	3%	21	3%	5	2%
Total	885	100%	675	100%	210	100%

Table III.4:EIC Utility Clients' Service Territory (1999 – 3Q2003)

Includes BPA and PacifiCorp

#### **Sector of Hotline Request**

Almost half of the total inquiries from 1999 through 2002 were about commercial business energy applications (Table III.5). During the first three quarters of 2003, however, the percentage of commercial business inquiries jumped dramatically to almost two-thirds (65%) of total inquiries.<sup>14</sup> During the same period, the percentage of residential business inquiries dropped seven percentage points to only 19% of the total inquiries.

Business	Tota	al	1999-2	2002	1-3Q 2003	
Sector	No. Utility Inquiries	Percent	No. Utility Inquiries	Percent	No. Utility Inquiries	Percent
Agriculture	18	2%	14	2%	4	2%
Commercial	461	52%	325	48%	136	65%
Industrial	103	12%	87	13%	16	8%
Institutional	91	10%	76	11%	15	7%
Residential	212	24%	173	26%	39	19%
Total	885	100%	675	100%	210	100%

Table III.5:Business Sector of Utility Hotline Request15

#### **Inquiry Topics**

As shown in Table III.6, utility hotline inquiries covered a wide range of topics. The most common request, however, was simply for information about the EIC (21% of inquiries). There were also many requests for information about general energy use (11%), lighting (9%), and HVAC (7%). The most

<sup>&</sup>lt;sup>14</sup> The utility marketing campaign – with the associated PTR mailings – may have led to this increase in requests for efficiency information for the commercial sector.

<sup>&</sup>lt;sup>15</sup> Sector reflects the subject of the inquiry, not the sector of the caller.

substantial difference between the periods 1999-2002 and the first three quarters of 2003 occurred in the percentage of calls about the EIC (requesting general information), which jumped from 16% to 37% of all calls; this can be attributed to the marketing campaign.

	To	tal	1999-	2002	1-30	1-3Q 2003	
General Topic	No. Utility Inquiries	Percent	No. Utility Inquiries	Percent	No. Utility Inquiries	Percent	
EIC	187	21%	109	16%	78	37%	
Energy Use*	96	11%	78	12%	18	9%	
Lighting	80	9%	62	9%	18	9%	
HVAC	64	7%	51	8%	13	6%	
Motors	54	6%	40	6%	14	7%	
Water Heating	46	5%	38	6%	10	5%	
Other	44	5%	36	5%	6	3%	
Building Envelope	40	5%	29	4%	11	5%	
Utility Programs/Rates/Info	37	4%	34	5%	3	1%	
Appliances	32	4%	25	4%	7	3%	
Renewable Resources	29	3%	26	4%	3	1%	
Codes/Standard/Laws	27	3%	24	4%	3	1%	
Education	22	2%	17	3%	5	2%	
Refrigeration	21	2%	16	2%	3	1%	
Electrical Systems	20	2%	18	3%	4	2%	
Economics	14	2%	12	2%	2	1%	
Computer Software	11	1%	9	1%	2	1%	
Industrial Processes	9	1%	8	1%	3	1%	
Management/Admin	8	1%	6	1%	0	0%	
Power Production	7	1%	6	1%	1	0%	
Building Design	6	1%	6	1%	0	0%	
Compressed Air	5	1%	4	1%	4	2%	
Environment	5	1%	1	0%	1	0%	
Pumping Systems	5	1%	4	1%	1	0%	
Water Conservation	4	0%	4	1%	0	0%	
Weather Data	4	0%	4	1%	0	0%	
Organizations/Programs	3	0%	3	0%	0	0%	
Power/Independent	3	0%	3	0%	0	0%	
Transportation	2	0%	2	0%	0	0%	
Total	885	100%	675	100%	210	100%	

Table III.6:Utility Hotline Inquiries by Topic (1999 - 3Q 2003)

Energy Use includes: auditing, accounting, fuel switching, peak load management, and plug load.

### Mode of Delivery

As shown in Table III.7, replies to EIC hotline inquiries during 1999-2002 were split almost equally among postal mail (34%), telephone (38%), or email

(37%); only 10% were made via fax. As would be expected, email has been playing an increasing role (Figure III.2) in responding to inquiries: the percentage of email responses jumped to 54% in 2002, and continued to rise to 59% during the first three quarters of 2003 (compared to only 18% in 1999).

Method of	Total		1999	-2002	1-3Q 2003	
Inquiry	No. Inquiries	Percent	No. Inquiries	Percent	No. Inquiries	Percent
Postal Mail	281	32%	230	34%	51	24%
Fax	76	9%	65	10%	11	5%
Email	371	42%	248	37%	123	59%
Telephone	342	39%	257	38%	85	41%
Total*	885	100%	675	100%	210	100%

Table III.7:Mode of Delivery of Response to Utility Inquiry (1999-3Q 2003)

Some clients received more than one method of reply

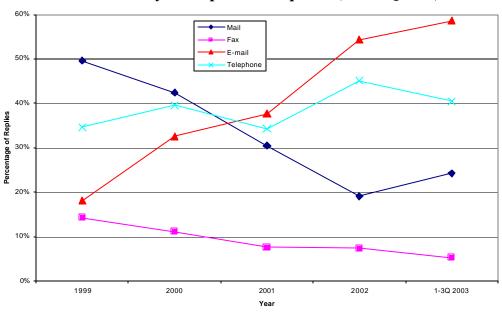


Figure III.2: Mode of Delivery of Response to Inquiries (1999-3Q 2003)

### **Referral to EIC**

Although a substantial number of 1999-2003 inquiries (59%) by utility staff in the EIC hotline database came from repeat callers, the marketing campaign in 2003 seemed to have an impact in attracting new utility users (Table III.8).

For example, repeat callers represented 64% of all inquiries between 1999-2002, but only 44% in the first three quarters of 2003. In addition, the percentage of referrals attributed to EIC marketing jumped dramatically, from only 3% in 1999-2002 to 24% in the first three quarters of 2003.

	То	tal	1999	-2002	1-3Q 2003		
Source	No. Inquiries	Percent	No. Inquiries	Percent	No. Inquiries	Percent	
Repeat User	523	59%	431	64%	92	44%	
Clearinghouse (general/marketing)	69	8%	19	3%	50	24%	
Internet Resource	60	7%	52	8%	8	4%	
Media	59	7%	40	6%	19	9%	
Utility*	59	7%	38	6%	21	10%	
WSU (CE/Web/Staff)	50	6%	38	6%	12	6%	
Conference/Exposition	30	3%	26	4%	4	2%	
Other	8	1%	7	1%	1	1%	
NEEA (General or Venture)	7	1%	4	1%	3	1%	
Government (DOE/EREC/EREN)	4	<1%	4	1%	0	0%	
Building contractor/official	2	<1%	2	0%	0	0%	
Library	2	<1%	2	0%	0	0%	
Commercial Business	1	<1%	1	0%	0	0%	
Product Vendor	1	<1%	1	0%	0	0%	
Unknown	10	1%	10	1%	0	0%	
Total	885	100%	675	100%	210	100%	

Table III.8:Source of EIC Utility Referral (1999-3Q 2003)

Contacts from utilities that reported the source of their referral as a "utility" may have learned about the EIC from either a brochure on display in their office or by word of mouth.

# **Summary of Findings**

*Utilities remain the largest identified business sector in the EIC Case Management Database*. Examining the nearly five years from 1999 through the 3<sup>rd</sup> quarter of 2003, an average of 24% of the inquiries came from utilities. Other important sectors included consultants (architects/engineering firms/ESCOs, 17% of the inquiries), government (14%), individuals (not calling from work, 8%), and education (8%).

*The EIC utility marketing campaign has led to a substantial increase in utility inquiries*. This was indicated by a number of factors, including:

• In the first three quarters of 2003, there were a total of 507 inquiries, 41% of which came from utilities, compared to only 25% in 2002. The average number of utility inquiries from 1999-2002 was 169 per

year; in the first three quarters of 2003, however, there have already been 210 utility inquiries.

- Percentage of referrals attributed to EIC marketing jumped dramatically, from only 3% in 1999-2002 to 24% in the first three quarters of 2003.
- Repeat utility callers dropped from 64% in 1999-2002 to 44% in the first three quarters of 2003, indicating a substantial number of new EIC clients. Many of the first-time callers appeared to be requesting more information about the EIC, as the utility callers requesting general EIC information rose from 16% in 1999-2002 to 37% in the first three quarters of 2003.

*Email as the mode of response to inquiries continues to rise*. Fifty-nine percent of the inquiries were responded to by email during the first three quarters of 2003, as compared to only 37% during 1999-2002.

# quantec

## IV. Survey of Utility Professionals

In order to assess how utility employees have responded to the EIC marketing campaign, new Web page, and new services, Quantec conducted a survey of Northwest utility staff. Utility (including BPA) staff represent the business end-users that most commonly call the EIC hotline and have been identified as the important target audience for the EIC.

Our survey was designed to answer a number of questions, including:

- How are utility staff learning about the EIC? Does the way in which they learn about the service affect their decision to use it?
- Which EIC services are most commonly being used?
- Is the EIC perceived as a high quality resource for energy efficiency information?
- For those who use the Web site, have they noticed any changes over the last 12 months? Furthermore, do these changes make the Web page easier to navigate?
- Are they familiar with the Utility Product and Technology Review (PTR) service? Have they requested anything (such as fact sheets) from the PTR service?<sup>16</sup>
- Do utility staff remember receiving any marketing materials? Has the marketing campaign had any influence on the use of the EIC by utility professionals?

## Methodology

The research was conducted by means of a brief online survey with utility staff in June and July of 2003. A series of three survey requests were sent out via email, each containing a link to an online survey created by Quantec. The invitation and final instrument are included in Appendix B.

The sample was drawn from the EIC Case Management Database, the Alliance utility contact list, respondents to an online utility needs assessment

<sup>&</sup>lt;sup>16</sup> The Product and Technology Review offers clients a detailed review of a product or technology based on discussions with the manufacturer, secondary research, and independent testing results. Chapter I provides a detailed description of the service.

survey conducted in 2002, and from referrals to other utility staff.<sup>17</sup> Combining these three sources, we had an email sample of 745 utility employees, representing 140 northwest utilities (out of an estimated 156 in the entire region).<sup>18</sup>

As shown in Table IV.1, utility employees from east (45%) and west (45%) of the Cascades were represented, as were utility staff from large (55%), medium (20%), and small (26%) utilities.

Utility Size	Service Territory					
Stinty Size	East	West	East/West	Total Contacts		
Large (Over 30,000 customers)	145 (19%)	185 (25%)	78 (10%)	408 (55%)		
Medium (10,000-30,000 customers)	73 (10%)	73 (10%)	0 (0%)	146 (20%)		
Small (Less than 10,000 customers)	114 (15%)	77 (10%)	0 (0%)	191 (26%)		
Total	332 (45%)	335 (45%)	78 (10%)	745 (100%)		

Table IV.1:Email Sample by Utility Size and Service Territory

Utilities serving a larger number of customers, of course, also have more staff, and this was reflected in our sample. As shown in Table IV.2, the number of email contacts was greater at the larger utilities compared to the medium or smaller utilities. For example, our sample contained an average of 18.5 contacts per utility for companies serving more than 30,000 customers, compared to only 4.2 and 2.3 contacts per utility for medium and smaller utilities, respectively.

	Contacts in Sample	Utilities Represented	Contacts per Utility
Large (Over 30,000 customers)	408 (55%)	22 (16%)	18.5
Medium (10,000-30,000 customers)	146 (20%)	35 (25%)	4.2
Small (Less than 10,000 customers)	191 (26%)	83 (59%)	2.3
Total	745 (100%)	140 (100%)	5. <i>3</i>

Table IV.2:Email Contacts by Utility Size and Service Territory

<sup>&</sup>lt;sup>17</sup> Energy Ideas Clearinghouse: Marketing to Utilities. Quantec, LLC, October 15, 2002. Alliance Market Progress Evaluation Report #E02-105. The sample for this study was derived from the Alliance and EIC utility contact lists, interviews with "key informant" utility staff, and referrals. Note that the previous survey was a more comprehensive energy needs assessment study; this survey examined responses to the marketing campaign and utility use of EIC services.

<sup>&</sup>lt;sup>18</sup> The EIC also maintains a mailing list of utility professionals, assembled from the Alliance list and their case management database, and would be largely similar to the list we had assembled.

Although the initial sample included 745 contacts at 140 Northwest utilities, a number of the contacts had invalid or bounced email addresses. Removing these names from the sample left 604 contacts representing 129 Northwest utilities (Table IV.3).

To maximize the response rate, a number of email reminders were sent to each respondent, including:

- A general email invitation to everyone on the contact list (June 24, 2003)
- A general reminder email to those who had not completed the survey (July 3, 2003)
- A follow-up email, including a deadline for completion, for those that did not complete the survey (July 15, 2003)

In addition to the email invitations, a chance to win a \$100 gift certificate to an online retailer was offered to all those who had completed the survey by the July 18, 2003 deadline. Our persistence in contacting the mailing list led to completions by 47% of the valid respondents, representing 69% of the valid utilities (Table IV.3).

Utilities	Respondents
140	745
11	141
129	604
NA	56
129	660
89	312
69%	47%
	140 11 129 NA 129 89

Table IV.3:Overall Sample Disposition for Online Survey

Respondents were asked to forward information to coworkers. The figure only includes respondents that completed the survey but were not in the original sample.

\*\* A number of respondents did not include their utility and thus are not included in the utility count. The utility response rate, therefore, is a conservative estimate.

As shown in Table IV.4, the 312 respondents that completed the survey reflected the total sample: they represented utilities from both the eastern and western portions of the region, as well as a mix of different sized utilities. The majority of the respondents worked in utilities in Oregon (26%) and Washington (52%), although Idaho (10%) and Montana (9%) were also well represented (Table IV.5). In addition, fourteen of the respondents (4.5%) were previous respondents from the 2002 survey.

Utility Size	Utility Region				
Othry Size	East	East and West	West	Total	
Large	58 (19%)	90 (29%)	42 (13%)	190 (61%)	
Medium	31 (10%)	37 (12%)	0 (0%)	68 (22%)	
Small	34 (11%)	20 (6%)	0 (0%)	54 (17%)	
Total	123 (39%)	147 (47%)	42 (13%)	312 (100%)	

Table IV.4:Completed Online Surveys by Utility Size and Service Territory

Table IV.5:
<b>Completed Online Surveys by Utility State</b>

State where Respondent Works	Number of Respondents
Oregon	83 (27%)
Washington	168 (54%)
Idaho	33 (11%)
Montana	30 (10%)
Utah	4 (1%)
Wyoming	3 (1%)
Nevada	2 (1%)
California	2 (1%)
Missing	1 (<1%)
Total Respondents*	312 (100%)

The total number of respondents sums to greater than 312 because some respondents answered that they work in more than one state.

The online survey had a total of 15 questions about the respondents' energy information needs; awareness, use, and perceptions of the EIC; satisfaction with the Web site and Product and Technology Review service; and recall regarding marketing materials received. Each of these is discussed in more detail below.

#### **Energy Information Needs**

As shown in Table IV.6, the majority of the respondents worked in either energy services (47%) and/or conservation (54%), with customer service also being well represented (22%).

Department	Number of Responses*		
Energy Services	147 (47%)		
Conservation	167 (54%)		
Engineering	17 (5%)		
Human Resources	7 (2%)		
Customer Service	69 (22%)		
Communications/Public Relations	19 (6%)		
Management/Administration	19 (6%)		
Marketing	10 (3%)		
Other	34 (11%)		
Total Respondents	312 (100%)		
* Note that the number of respondents sums to more than 312			

Table IV.6:	
<b>Company Department</b>	

Note that the number of respondents sums to more than 312 because respondents were asked to check all that apply

With such a high percentage of respondents in energy services/conservation, it is not surprising that the respondents to the online survey overwhelmingly (96%) reported that they had a need for energy efficiency information (Table IV.7). In addition, the majority of the respondents (94%) also reported that they provide energy-related information to customers (Table IV.8). Earlier studies found that the EIC is perceived primarily as a source of energy efficiency information, not general energy information, and this likely led to the higher percentage of completions by those in positions of using and disseminating energy efficiency information.

Table IV.7:Do You Have a Need for Energy Efficiency Information?

	No. Responses		
Yes	298 (96%)		
No	14 (4%)		
Total	312 (100%)		

Table IV.8:
Do You Provide Energy-Related Information to Customers?

	No. Respondents
Yes	292 (94%)
No	20 (6%)
Total	312 (100%)

#### Awareness, Use, and Perceptions of the EIC

The survey successfully reached those that were aware of the EIC: as shown in Table IV.9, most of the respondents (86%) were aware of the EIC, and nearly two-thirds of the respondents (61%) reported that they had used the EIC services.

Use and awareness of the EIC did not vary substantially based on utility size. For example, 59% of the small, 65% of the medium, and 61% of the large utility respondents reported that they had used the EIC services. Use of the EIC was slightly higher west of the cascades (67%) versus east of the cascades (56%), possibly due to the proximity of the EIC to those utilities West of the cascades.

EIC Use and	Total	Utility Size			Utility Region		
Awareness		Small	Medium	Large	East	West	East and West
Yes, and I have used it	191 (61%)	32 (59%)	44(65%)	115(61%)	69 (56%)	98 (67%)	24 (57%)
Yes, and I have NOT used it	79 (25%)	17 (31%)	12(18%)	50(26%)	32 (26%)	38 (26%)	9 (21%)
No, I have not heard of EIC	32 (10%)	3 (6%)	8(12%)	21(11%)	17 (14%)	8 (5%)	7 (17%)
Not Sure	10 (3%)	2(4%)	4(6%)	4(2%)	5 (4%)	3 (2%)	2 (5%)
Total**	312 (100%)	54 (100%)	68 (100%)	190 (100%)	123 (100%)	147 (100%)	42 (100%)

Table IV.9: Awareness and Use of the EIC\*

Percentages based on the total within the column, not the table.

Nearly half of the respondents (49%) first learned about the EIC by word of mouth – far higher than any other source (Table IV.10). In addition, there was a substantial jump from 2002 to 2003 in the percentage of respondent that learned about the EIC from a mailing (3% to 16%); this is likely due to the EIC utility marketing campaign.

The use of the EIC – those that were simply aware versus actually using the services – varied slightly based on how respondents learned about the EIC. Those respondents who learned about the EIC through the direct mailing were less likely to report using the EIC (60%) than those who were aware of the EIC overall (71%). (Table IV.11). EIC usage was higher, therefore, among those that learned about the EIC through other methods (e.g., word of mouth and Web page).

Learn About EIC	2003 Respondents	2002 Respondents		
Word of Mouth	132 (49%)	54 (54%)		
EIC booth or presentation at conference	23 (9%)	9 (9%)		
Ad in journal/ magazine/ newsletter	7 (3%)	8 (8%)		
Web Search/Found link on another Web page	23 (8%)	9 (9%)		
NW Energy Efficiency Alliance	5 (2%)	4 (4%)		
EIC Mailing	43 (16%)	3 (3%)		
Other	22 (8%)	7 (7%)		
Don't know/Missing	15 (5%)	6 (6%)		
Total*	270 (100%)	100 (100%)		

# Table IV.10:First Learn About the EICBase: Respondents Who Are Aware of EIC Services

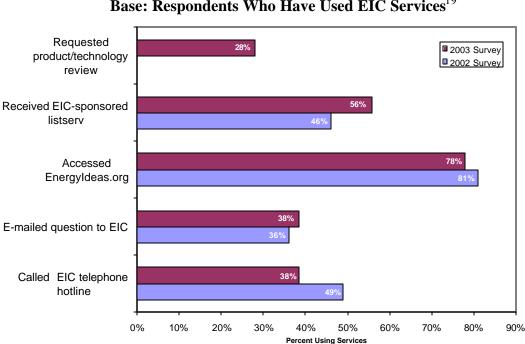
270 of the 312 surveyed in 2003 were aware of the EIC.

# Table IV.11:EIC Use by How First Learned about the EIC\*Base: Respondents Who Are Aware of EIC Services

Answer	Used EIC Services	Aware, Not Used EIC Services	Total
Total	191 (71%)	79 (29%)	270 (100%)
Word of Mouth	98 (74%)	34 (26%)	132 (100%)
EIC booth/ presentation at conference	15 (65%)	8 (35%)	23 (100%)
Ad in journal/ magazine/ newsletter	5 (71%)	2 (29%)	7 (100%)
Found link on another Web page	17 (74%)	6 (26%)	23 (100%)
EIC Mailing	26 (60%)	17 (40%)	43(100%)
Other	16 (73%)	6 (27%)	22 (100%)
Don't know/Missing	10 (67%)	5 (33%)	15 (100%)

\* Percentages based on the total within the row.

Figure IV.1 shows the most commonly used EIC services in both the 2002 and 2003 surveys. Use of the hotline decreased among the respondents, from 49% in 2002 to 38% in 2003, while those who received and EIC sponsored listserv jumped from 46% to 56%. The Product and Technology Review service, which was not available at the time of the 2002 survey, was used by 28% of the survey respondents who have used at least one EIC service.



## Figure IV.1: EIC Services Used in the Past 12 Months Base: Respondents Who Have Used EIC Services<sup>19</sup>

To evaluate their perceptions regarding the EIC, respondents were also asked to rate how strongly they agreed or disagreed with certain statements (Table IV.12). There were a number of interesting findings including:

- Respondents were satisfied with the EIC services, agreeing that the EIC provides excellent customer service (77%), provides highquality useful responses to question (66%), develops high quality fact sheets (67%), and has the expertise to answer any energy-related question (68%).
- Although respondents were extremely satisfied with the EIC services, few respondents (21%) stated that the EIC was the first place they go for energy-related information. This paradoxical finding could be a result of the fact that respondents forget that the EIC exists, a conclusion reached in previous MPERs.
- While almost half of the respondents (49%) say they refer their colleagues to the EIC, only a third (33%) say they refer their customers to the EIC.

<sup>&</sup>lt;sup>19</sup> Based on 69 respondents in 2002 and 190 respondents 2003.

EIC users also provided many additional comments about the EIC, most of them extremely favorable. The full set of responses is included in Appendix C, but a number are included here:

- "I have used EIC information over the years and am very pleased with it."
- "Staff is thorough, dependable, proactive, and professional. They are one of my best resources when assisting customers."
- "Good customer service and informed people."
- "It has become my one-stop shopping mall for information."
- "I have found the staff to be highly trained, professional, and very responsive to my requests."

Statement	Average of Answers (5 = strongly agree; 1= strongly disagree)	<b>"Top Two"</b> Box (% Agree or Strongly Agree)	N*
EIC provides excellent customer service.	3.95	77%	168
EIC is the first place I go for energy-related needs.**	2.95	21%	174
I use the EIC because I know they have the expertise to answer any energy-related question.	3.81	68%	173
EIC Librarians provide high quality research services.	3.80	64%	153
EIC consultants provide high quality, useful responses to energy-related questions.	3.81	66%	159
I often refer my customers to the EIC to get their questions answered.	3.05	33%	164
I often refer my colleagues to the EIC to get their questions answered.	3.35	49%	167
EIC develops high quality fact sheets on energy efficiency topics.	3.77	67%	159

Table IV.12:Perception of the EIC

Maximum number of respondents was 181. Those who answered "Don't know/Not applicable" were not included above.

\*\* The primary sources for energy information were explored in the previous Market Progress Evaluation Report, and were determined to be colleagues/peers and general search engines.

## Satisfaction with the Web Site

Of the 146 respondents who had accessed the Web site in the last 12 months, less than a third of them (30%) reported noticing any changes despite a major

re-launch in January 2003.<sup>20</sup> EIC users were asked to provide additional comments about whether it is easy to navigate the Web site, and the results were mixed: of the 35 comments, 17 were positive, 11 were negative, and 7 were mixed.<sup>21</sup> Positive responses included:

- "Easier to find the information I am looking for not as cluttered."
- "The site is easier to move around on and seems to be organized in a more logical way."
- "The site is much more user-friendly!"
- "Yes it is easy to get around and find what info you want to read."
- "Nicer look on the home page. Seems similar underneath. Faster though."
- "Yes, easier to find information needed in a timely manner."
- "Yes, it is easier to find topics and to move through the site."
- "Yes, the site is less cluttered."

Negative comments included:

- "I feel it may have been easier [to search] before the change. I like the old Web page better."
- "I find the topic pages with categories and search results VERY confusing. I used to get to basic information much more quickly in the old site."
- "The new site has more information but it is harder to use."
- "Inefficient design; the old one was easier. Haven't used it much since the change."
- "I am not a regular user and it usually takes me several tries to find the right area for what I am looking for."
- "It just seems like the Web site has gotten more complex than it needs to be."
- "The new format is attractive but I miss the Tip of the Day."

<sup>&</sup>lt;sup>20</sup> The respondents that did not notice the changes may have been either first time users, infrequent users, or accessed the page before the January 2003 re-launch.

<sup>&</sup>lt;sup>21</sup> The full set of responses is included in Appendix D. Note that the findings from selfreported comments may differ from the findings of a usability study, where participants are normally asked to review the entire Web site, conduct data searches, and compare the site to other energy information sites.

#### Satisfaction with the Product and Technology Review Service

Thirty-eight percent of the respondents were familiar with the Product and Technology Review service. In addition, 51 of the respondents (or 16%) had contacted the EIC regarding the PTR, and 29 respondents (9%) reported that the EIC (or the Lighting Design Lab) had prepared a fact sheet for them.

	Total	Percent
Total Sample	312	100%
Familiar with PTR service	119	38%
Contacted EIC regarding PTR	51	16%
Had a fact sheet prepared	29	9%

Table IV.13: Use of PTR Service

The respondents were generally pleased with the fact sheets, reporting that:<sup>22</sup>

- "We use the EIC to provide reviews of technologies that we don't have significant experience with, or to review "black box" technologies."
- "They did a good job of researching my question and providing me with information."
- "The information was very complete and they had good follow up."
- "Very objective product review."
- "This is an excellent resource for [utility] and our customers."

Although most recipients of the fact sheets were satisfied with the materials they received, two respondents expressed concern over EIC's willingness to report anything that might negatively affect a vendor's reputation/product:<sup>23</sup>

- "I had heard via word-of-mouth that the product I asked about had several problems and that one utility that had used the product in their new offices had replaced them all. However, the written review I received had no mention of poor performance. I think that's a problem."
- "[Product] information has been closely held due to "liability" concerns . . . In cases, [our] users were provided only hard copies of the PTRs . . . . Barriers to the dissemination of information are unacceptable."

<sup>&</sup>lt;sup>22</sup> The complete set of comments can be found in Appendix E.

<sup>&</sup>lt;sup>23</sup> The EIC is currently addressing these liability concerns so that dissemination of information is not hindered.

Other constructive criticism included improving the collection and dissemination of the information:

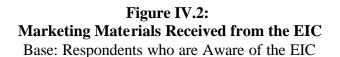
- "There has not been a sufficient gateway provided to access the reports or to gather other relevant information on a specific product (e.g., E-Source, EPRI, DOE, University studies, other content). This should be handled by providing links to relevant Web sites and documents. The information needs to be easily accessed via the Web site to be usable."
- "There is not a clear process for identification of PTRs requested, in progress or published."
- "The PTR effort has a lot of potential to serve the needs of utilities and others seeking to establish the credibility of vendors claims for energy saving devices. It could be developed in such a way that individuals could contribute to the body of information gathered on any particular technology, and be made to benefit not only utilities but consumers and responsible vendors/manufacturers."

## **Marketing Materials**

All participants were also asked which marketing materials they had received from the EIC in the last 12 months (Figure IV.2). A total of 62% recalled receiving at least one EIC marketing piece during the last six months: 36% recalled receiving email about the utility Product and Technology Review service, and 29% recalled receiving a postcard announcing the new Web site. Respondents recalled the other marketing materials at much lower levels: 14% recalled receiving the package of factsheets, notepads, pens, and PTRs; 10% recalled receiving a summary of recent hotline requests.

As shown in Figure IV.3, however, the number of recipients differed for many of these marketing approaches. The data suggest that the email announcement for the PTR – sent to only 350 people yet recalled by 36% of the respondents – may have been one of the more cost-effective marketing tools.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> We were unable to verify how many of the survey respondents, however, received each of these materials. A more formal study of promotional effectiveness, therefore, is still required to reach a more definitive conclusion about the most cost-effective promotional efforts.



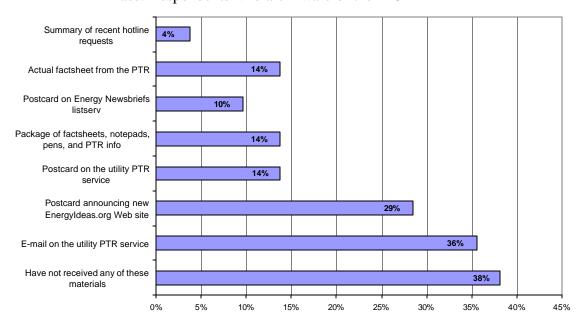
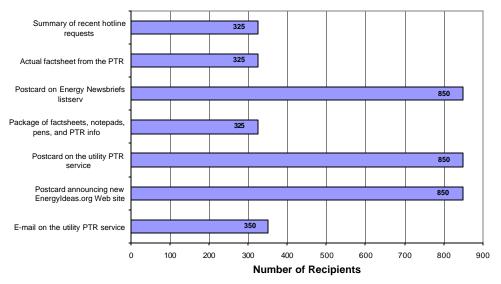


Figure IV.3: Number of Recipients for Marketing Materials



As shown in Table IV.14, recall of receiving marketing materials was correlated with use of the EIC. For example, 82% of those who recalled receiving marketing materials also reported using the EIC, while only 54% of those who did not recall the marketing materials reported having used the EIC services.

Use of the EIC	Have received marketing materials	Have NOT received marketing materials	Total
Aware and have used EIC services	129 (82%)	56 (54%)	185 (71%)
Aware but have NOT used EIC services	28 (18%)	47 (46%)	75 (29%)
Total Aware of EIC	157 (100%)	103 (100%)	260 (100%)

Table IV.14:Use of the EIC by Recall of Marketing Materials

## **Summary of Findings**

*The majority of the respondents to the survey (96%) had a need for energy efficiency information.* This figure may have been biased upward because our sample consisted primarily of those in energy services/conservation. In addition, most (94%) provide energy-related information to customers.

Although there was a substantial jump in the number of respondents learning about the EIC from a mailing, word of mouth continues to be the most common method for utility staff to learn about the EIC. As a result of the EIC mail campaign 16% of the respondents reported learning about the EIC from a mailing, compared to 3% in 2002. However, nearly half of the respondents (49%) learned about the EIC from word of mouth, far higher than any other source. In addition, only 60% of those that learned about the EIC through the direct mailing had reported using the EIC, compared to 70% of all those that were aware of the EIC; EIC usage was higher, therefore, among those that learned about the EIC through other methods (e.g., word of mouth and Web page).

Although respondents were extremely satisfied with the EIC services, few respondents (21%) stated that it was the <u>first</u> place they go for energyrelated information. This paradoxical finding could be a result of the fact that respondents forget that the EIC exists, a conclusion reached in previous MPERs. The EIC, therefore, may still have greater potential use among utility staff.

**Reactions to the new Web site design were mixed**. The responses to the new Web page were mixed: of the 35 respondents who discussed changes to the page in the last year, 17 of these commented that they liked the new navigation and content. Eleven respondents, however, found the new navigation to be more cumbersome and difficult to use than the previous design.

**Respondents who had received information from the Product and Technology Review service were pleased with the information they received.** Respondents reported that the information they received was complete, objective, and an excellent resource. However, a few respondents expressed concerns that the EIC may be withholding information that could damage a vendor's reputation with utilities, and presented ideas for the collection and dissemination of the information.

The most frequently recalled EIC marketing materials were an email about the utility Product and Technology Review service (36%) and a postcard announcing the new EnergyIdeas.org Web page (29%). A total of 62% of all respondents recalled receiving at least one EIC marketing piece during the last six months. Recall of marketing materials was correlated with usage of EIC services: of those who recalled receiving marketing materials from the EIC, 82% responded that they had used the EIC, compared to only 54% of the respondents that did not recall receiving marketing materials.

This chapter provides more details about the marketing activities initiated by the EIC, assesses how closely the campaign followed the recommendations of the marketing consultant, and provides our observations about the success of the marketing campaign based on the findings in Chapters II through IV.

The EIC conducted a number of marketing activities from September 2002 through September 2003. Many of these activities and messages were focused on utilities, as recommended by a marketing consultant in 2002. The most prominent activities, were:

- 1. **Development of branding campaign**. As a result of recommendations made by a marketing consultant, the EIC implemented a "branding" campaign for the EnergyIdeas.org Web site. This included the development of new letterhead, envelopes, labels, brochures, staff biographies, press releases, sample articles, publications lists, and the production of multiple collateral materials (switchplate stickers, pens, and post-it notes). Each item was designed by the WSU Energy Program and approved by Alliance staff.
- 2. Direct marketing. As shown in Table V.1, EIC staff developed a direct marketing campaign in 2002-2003, using various low cost techniques to promote the EIC hotline, listservs, the EnergyIdeas.org Web site, and the Product and Technology Review (PTR) service. For example, the EIC sent targeted email announcements and postcards to 350 Northwest utility professional with information about the PTR service, they mailed a postcard announcement to 5,000 Northwest energy professionals about the energynewsbriefs listserv, and mailed another postcard to 3,500 professionals announcing the new Web site. The EIC also developed a utility reference packet that was sent to approximately 325 utility staff and associations. The packet contained factsheets, a report of hotline requests, PTR overview, a brochure, and marketing collateral materials.
- 3. *Presentations at conferences/events*. The EIC maintained a visible presence at a number of important conferences and events. For example, they sponsored and had booths at the Northwest Power Association National Innovations Conference, the Idaho Energy Conference, the Washington PUD Association Annual Meeting, and the Oregon Rural Electric Cooperative Annual Meeting. The EIC also prepared informational presentations for utilities, and spoke to the Commercial/Industrial divisions at Seattle City Light.

- 4. *Posting EIC information on Listservs*. The EIC took advantage of the growing popularity of its listservs to announce the relaunch of the Web site and the PTR service.
- 5. *Reciprocal Web Linking/Coordination*. The EIC continued to work with other energy information Web sites to set up reciprocal links.
- 6. *Materials for utilities*. The EIC posted both a media kit and information for "utility communicators" (for inclusion in utility publications) on the EnergyIdeas Web site.

Month	Activity
December 2002	Distributed email announcing Utility PTR service to 350 NW utility staff, with overview factsheet
January 2003	Distributed postcard announcement about EnergyNewsbriefs listserv to 5000 Northwest energy professionals.
February 2003	Sent announcements of the website redesign to EIC listservs, and to other energy related websites for links.
March 2003	Distributed the utility reference packets to approximately 325 utility staff, and associations.
	Distributed 3500 Postcards announcing new website to NW energy professionals

Table V.1:Direct Marketing Activities by Month

## **Review of Marketing Consultant's Recommendations**

The consultant's marketing plan offered proposals for a sharpened *mission statement*, a focused definition of the EIC *market position*, and clearly defined *marketing objectives* both for the EIC as a whole and for each of the targeted markets.

The report proposed a new EIC mission statement:

"The EIC provides the most comprehensive, technical resource that NW business, industry, government and utilities use in implementing energy technologies and practices."

This statement is consistent with the EIC's primary target markets, and conveys its greatest strength: the quality and volume of technical resources at a client's disposal.

The report identified a number of message elements that may potentially motivate and resonate with the utility market include the following:

- Services are provided without fee
- The EIC has the expertise to answer any energy-related question

- EIC consultants provide high quality, useful responses to energyrelated questions
- High quality factsheets are available on many energy efficiency topics
- The EIC provides excellent customer service
- The EIC focuses on the needs of energy professionals

The report even suggested a market position combining these key messages:

"The EIC is the Northwest's most responsive and convenient energy information service, with expert knowledge and comprehensive research resources provided without fee to assist Northwest business, industry, government and utilities in addressing all their energy-information needs."

The proposed marketing objectives for the targeted utility market were identified as:

- To heighten regional utilities' awareness and increase their use of the EIC
- To clearly define the needs of the various segments of this market so that the EIC can improve and tailor its services to each
- To establish a process and criteria for developing new marketing communications that are in line with the new messages

The consultant recommended that the first approach for the utility market campaign be to target the opinion leaders through various personal and nonpersonal channels of communication. A second approach should be to focus on the EIC's relationship with the regional utilities (and with appropriate utility industry associations).

Public relations tactics include making presentations to interested utilities and related associations, participation in energy industry events (including conventions and trade shows), creating specialized listservs, and continuing to produce factsheets on topics relevant to utilities and their customers.

The report suggested that the campaign message read:

"The EIC is an energy information service offering the most reliable, comprehensive energy information and technical assistance available to Northwest utilities."

The consultant also conducted focus groups, and reported that the mid-sized to larger market segments principal interest was in being able to easily and reliably obtain unbiased energy information, particularly factsheets, product

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reviews, and case studies to use in decision making, providing recommendations and as a sales tool.

## **Evaluation of the Marketing Campaign**

*Marketing Approach and Objectives*. The EIC implemented many of the approaches suggested by the marketing consultant. For example, they used a mix of personal communication (appearances at conferences and presentations) and non-personal communications (e.g., direct mailings). The EIC could, however, continue to make presentations directly to utilities: in the last year the EIC only gave one presentation to a utility (Seattle City Light).

In terms of the primary objective – heighten regional utilities' awareness and increase their use of the EIC – this report presents evidence that, during the first three quarters of 2003, the EIC has been successful in meeting this objective. For example:

- In the first three quarters of 2003, there were a total of 507 hotline inquiries, 41% of which came from utilities, compared to only 25% of utility inquiries in 2002. The average number of utility inquiries from 1999-2002 was 169 per year; in the first three quarters of 2003, however, there have already been 210 utility inquiries.
- The percentage of first-time EIC utility clients increased from 36% in 1999-2002 to 56% in the first three quarters of 2003.
- Web site visits "spiked" in February 2003 at over 30,000, just following the mailing of postcards and announcement of the new site on the listservs.
- Utility inquiries in the Case Management Database increased markedly in April 2003, just after the March 24-31 mailing of a utility "reference packet"

*Mission Statement*. The EIC implemented the consultant's recommendation for the mission statement, displaying the new mission statement at the top of the "about us" page on their Web site. The EIC home page, however, includes an adaptation of this mission statement: "An objective, comprehensive, technical resource for Northwest businesses, industry, government, and utilities to implement energy technologies and practices." Notice that recommended words/language touting EIC capabilities, such as "the *most* comprehensive" have been dropped in this adaptation.

*Market Position*. The report suggested key words like "responsive," "convenient," "*most* comprehensive resources," "expert knowledge," and "without fee/at not cost." Some of these – particularly the fact that the information is available at no cost – are not presented in many of the marketing materials we reviewed.

## **Summary of Findings**

A variety of promotional methods have been implemented, increasing awareness and use among utilities. However, the EIC should explore which promotional methods are most cost-effective, allowing the EIC to conserve staff and financial resources in their outreach approaches.

In reviewing where the EIC followed the consultant's recommendations, and where the EIC chose to use its own language, it appears that the EIC is hesitant to use words that tout its own capabilities. We certainly recognize the sensitivities about appearing to boast, but as this and previous MPERs indicate, the EIC has a long track record of providing quality information, high customer satisfaction, and fast service – all for free. We therefore encourage the EIC to revisit the marketing consultant's report and begin consistently using more of the recommended key words in the marketing materials that tout the organization's capabilities and expertise.

In addition, the EIC should make efforts to more consistently promote both their mission statement and their market position. Many of the marketing materials we reviewed – including full page letters – provided abridged versions of these (e.g., "the EnergyIdeas Clearinghouse offers timely and objective technical resources that can add value to your important customer relations.") The EIC should attempt to consistently use the full message of their mission statement and marketing position.

In an effort to validate the quality of the information that the EIC is providing to customers, Quantec submitted a number of inquiries to the EIC via the telephone hotline and Web page. To avoid any possible bias in the responses, the inquiries were submitted such that the EIC was not aware that Quantec was requesting information as part of this evaluation, thus replicating the "mystery shopper" approach that is currently implemented in many market transformation studies.

## **Identifying Question Categories**

## **Question Characteristics**

To develop questions that reflected the types of inquiries typically submitted to the EIC, Quantec first reviewed the entries in the EIC database from 2000 through 2002 to determine what types and categories of questions were typically submitted. We focused our analysis on a number of different fields, including sector, topic, mode submitted, and type of request.

During these three years, the EIC Case Management Database recorded 2,493 inquiries. As shown in Table VI.1, nearly half were related to the commercial sector (49%), followed by the institutional (20%), residential (18%), and industrial (11%) sectors. More than half the inquiries came in over the telephone (60%), although email (32%) has played an increasingly important role for question submittal. Based on entries in one of the EIC database fields, the majority of the inquiries (68%) required technical assistance.

	Frequency	Percent
Sector of Request		
Agricultural	72	3%
Commercial	1,216	49%
Industrial	264	11%
Institutional	490	20%
Residential	451	18%
Mode of Request		
Email	805	32%
Telephone	1,507	60%
Other (conference, fax, mail, walk-in)	181	8%
Information Type		
Technical Assistance	1,700	68%
Information (general, program, referral, etc.)	793	32%

 Table VI.1:

 Summary of Requests from EIC 2000-2002 Case Management Database

As shown in Table VI.2, the most common general topic classification – independent of the specific topic – was "Energy Ideas Clearinghouse" (requesting information), followed by energy use, lighting, renewable resources, HVAC, and codes/standard/laws.

As shown in Table VI.3, there were a wide variety of combinations of general and specific topics covered by the inquiries.<sup>25</sup> The most common combination of general and specific topics was "EIC publications"; the EIC received 206 inquiries (or 8.3% of all requests) on this topic combination. The other questions were distributed over a large number of topic combinations, with no more than 4% in any one category. The top 20 combinations, in fact, made up only about 48% of all requests received by the EIC, demonstrating the many unique combinations of questions that the EIC received.

Top Six General Topics of Request						
General Topic	% of Inquiries					
Energy Ideas Clearinghouse	17.8%					
Energy Use	11.8%					
Lighting	10.0%					
Renewable Resources	7.7%					
HVAC	5.9%					
Codes/Standard/Laws	5.7%					

Table VI.2:					
EIC 2000-2002 Case Management Database:					
Top Six General Topics of Request					

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<sup>&</sup>lt;sup>25</sup> General topic and specific topic were two distinct fields in the database.

Topic of	Request	Total	Percent	Types of Questions
General	Specific	Count	Tercent	51
Energyldeas Clearinghouse	Publications	206	8.3%	Requests for brochures, postcards, marketing materials, and sometimes copies of specific publications
Energyldeas Clearinghouse	General Information	96	3.9%	Requests for brochures, postcards, marketing materials, asked to be on mailing list
Codes/Standards/ Laws	WSEC	94	3.8%	Information on energy codes for all end uses (mostly for Washington State)
Energy Use	General Information	74	3.0%	Consumption and demand questions for different end uses and sectors, sometimes aggregated
Energyldeas Clearinghouse	Energyldeas.org	65	2.6%	Use of Web site (how to get listed, add info, etc.), questions on listservs, some requests for general EIC information
Energy Use	End Use	62	2.5%	Consumption and demand questions, usually specified for different end uses and sectors
Renewable Resources	Wind	60	2.4%	Questions on the production, costs, and use of wind energy
Lighting	General Information	59	2.4%	Research into lighting/daylighting, where to buy, energy use from lighting, best lights to select to save energy, etc.
Lighting	Design/Quality	56	2.2%	Requests for lighting and productivity bibliography, how to select best lights
Energyldeas Clearinghouse	Management Issues	48	1.9%	Marketing/promotional ideas, looking for speakers, ways to work with EIC, etc.
Lighting	Decorative	48	1.9%	Requests for holiday lighting factsheet, info on holiday lighting
Energy Use	Audits	45	1.8%	How to find auditors, info about conducting proper audits
HVAC	Heating Systems	37	1.5%	Best type of heating system to select (size, type, etc.), installation/compatibility questions
Lighting	Fluorescent Lamps	35	1.4%	Compatibility and cost questions for fluorescents
Economics	Financing	35	1.4%	Assistance finding financing or grants for projects
Utility	General Information	35	1.4%	Lists of utilities, programs they offer, size, etc.
Address Change	All	34	1.4%	Client request for EIC to update their contact info
Renewable Resources	Photovoltaic	32	1.3%	Cost and logistical information for purchasing and installing various PV systems
BetterBricks	General Information	31	1.2%	Information about green building, services/resources/functions of BetterBricks
Building Design	General Information	31	1.2%	Seeking general and information and some specific questions on green (sustainable) building practices

# Table VI.3:EIC 2000-2002 Case Management Database:Top 20 Combinations of General and Specific Topic of Request

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#### **Observations about EIC Case Management Database**

During our review of the EIC Case Management Database, we made several observations about the data it contained. The primary one was that certain topic categories, such as "Energy Ideas Clearinghouse," "General Information," and "Publications," were overused to classify inquiries. Over one-fourth of all inquiries were categorized into these groups, and about one out of six were put in the "Energy Ideas Clearinghouse" category. Our cursory review of the inquiries suggested that many could have been categorized in ways that would have been more meaningful.

Another observation was that many inquiries in the "Energy Ideas Clearinghouse" General Topic category were more administrative or process related than they were connected to an energy issue. For example, one inquiry was for Energy Ideas postcards, another was for email addresses of people on a mailing list, and one was from someone who had had problems posting information on the EIC's electronic bulletin board. Although these contacts should be tracked, they should be entered into a special category so they do not inflate the counts for categories that may not be appropriate.

## **Developing and Submitting Questions**

## **Creating Question Categories**

We wanted to develop categories that would best represent the types of questions received by the EIC. To do so, we identified the following factors:

- *Sector*: The three most common sectors commercial, residential, institutional
- *General Topic*: The four most common topics energy use, lighting, renewable resources, and HVAC
- *Mode*: Telephone or email
- *Information type*: Informational or technical assistance

Note that, in selecting the General Topic areas, we did not include the most commonly assigned one, EnergyIdeas Clearinghouse, as it was not a truly topical category and contained questions covering a wide range of topics. "Information type" was intended to reflect the complexity of the questions asked and whether or not they were likely to require primary data and information or just references to readily available information or sources.

To minimize the possibility that the questions we asked would bias the results because of unintended correlations between factors, we used software that generated an orthogonal design approach, which eliminated collinearity among the factors we used. This prevented bias that might result, for example, because we asked more questions about energy use in commercial buildings than in other buildings. This design produced 20 question categories.

#### **Developing the Questions**

We created one question for each of the 20 question categories. The questions were based on our review of inquiries previously submitted to the EIC and our professional experience.

#### **Submitting the Questions**

A mix of ten energy professionals and university engineering students submitted questions:

- Three energy services professionals from utilities
- Two energy professionals from consulting firms
- Two government professionals with energy expertise
- One public school system employee with energy system responsibilities
- Two engineering students from a university taking energy-related courses

To standardize our research and adhere to our proposed methodology, we asked each participant to apply the following set of protocols, which was provided to them both in writing and orally:

- Submit the questions under their own name, indicating that the information was for their own or their organization's needs. They were asked specifically to not identify Quantec as the source of the questions.
- Ask the questions exactly as provided to them by Quantec.
- Carefully record the history of when they submitted the questions and how the EIC responded. This included recording the following variables in a table that we developed:
  - Date and time the question was submitted to the EIC
  - The question submitted
  - Mode question was submitted (phone or email)
  - Date and time response(s) was received
  - Initial contact person at EIC (person answering the phone or emailing a reply)
  - Mode response(s) was received (phone, fax, email, postal mail)
  - Response provided by initial contact person

- Type of information received (fact sheet, referral to Web, brochure, etc.)
- Detailed description of information received and comments on the quality of the information provided

Participants were asked to provide all materials received from the EIC, including any emails (and attachments), hard copy information, or faxes, to Quantec. Each participant received one to three questions for submission. Appendix F contains an example of the data collection and reporting form.

The first round of questions was distributed to the selected participants on April 8, 2003, and they were asked to submit them to the EIC over a twoweek period. The second and third sets of questions were distributed to participants on April 16 and April 29, respectively.

As participants completed their contacts and received information, they forwarded the information to Quantec. In some cases, we had to answer questions and provide feedback to the participants to assist them with the process.

## **Analysis and Results**

The objective of our analysis was to determine how well the EIC performed in responding to inquiries submitted by telephone and email. The analysis was structured to assess performance on several dimensions and how performance was affected by several different variables. The primary variables of interest were the factors listed earlier – sector, general topic, mode of the inquiry, and information type. Once we started data collection, some of the participants found that the EIC staff were unwilling to provide them much or, in some cases, any assistance, stating that they had specific priorities about whom they served. For this reason, we added another variable to our analysis – the type of organization represented by the participant. This finding is discussed in more detail later.

Our analysis started with a review by Quantec of the materials collected by each participant. This included reading all hard-copy reports and other materials and reviewing Web sites to which the EIC referred the participant.

We analyzed the responses to each question in terms of the following:

- *Response time*. How long did it take for the EIC to provide its initial reply? How long did it take to provide usable information?
- *Thoroughness of information*. How comprehensive was the EIC reply?
- *Relevance*. How relevant was all the material in the response to the issues raised in the request?

- *Accuracy*. How accurate was the information provided?
- *Recentness of information*. How current was the information?

The response time was easy to document based on the data provided by the participants. We broke the response time into two categories: the time until the initial response and the time until usable information was provided. The times were measured in hours, and weekends were excluded.

For the other performance measures, we used a five-point scale to rate the information provided (1=low; 5=high). A Quantec engineer conducted all the ratings, so the relative ratings were not influenced by differences among raters.

We calculated a simple average of the ratings for each response. We also calculated the simple averages for the ratings by the variables listed above. Averages of the results are shown in Table VI.4, based on 19 questions.<sup>26</sup>

#### **Response Time**

The average time to receive the first response from the EIC was 27.4 hours, a little over the target of 24 hours (or eight business hours). Only five (of 19) responses took more than 24 hours, and one had not been received by the time we terminated data collection (ten working days after submittal). As would be expected, the average time to get a first response via a phone call (11 hours) was less than for emails (about 48 hours) since many initial responses were provided at the time of the call. Overall, the average time required to receive a usable response was about two days. For phone calls, usable responses were obtained in about one day, on the average, and for emails the average time was about four days.

<sup>&</sup>lt;sup>26</sup> The twentieth question was not analyzed due to the lack of an EIC response after ten days.

		Sector			Gener	al Topics		How Ques	tion Came In	Informa	tion Type		Contacte	er Type		Total
											Technical					
	Commer-	Institu-	Resi-	Energy	Lighting	Renew-				Infor-	Assistance		Education	Govern-	Private	
Average	cial (7)	tional (8)	dential (4)	Use (5)	(5)	ables (5)	HVAC (4)	Email (8)	Phone (11)	mation (7)	(12)	Utility (6)	(5)	ment (5)	Sector (3)	(19)
Time to First																
Response, hr.	32.7	33.3	6.3	33.1	21.8	37.9	14.3	49.5	11.3	22.6	30.2	20.4	33.1	33.1	22.6	27.4
Time to Usable																
Response, hr.	95.4	36.5	6.3	33.1	72.4	41.9	62.1	94.7	20.7	37.3	60.3	93.6	33.1	33.1	30.9	51.8
Thoroughness	4.0	3.3	2.5	3.4	3.6	2.6	4.0	4.6	2.5	3.1	3.5	4.7	2.2	3.8	2.0	3.4
Relevance	3.9	3.3	2.5	3.6	3.4	2.8	3.5	4.3	2.6	3.3	3.3	4.5	2.4	3.6	2.0	3.3
Accuracy	4.3	3.3	3.8	3.8	3.6	3.8	3.8	4.8	3.0	3.7	3.8	4.7	3.2	3.8	2.7	3.7
Recentness	4.4	3.9	3.5	4.0	4.0	3.8	4.3	4.8	3.5	4.1	3.9	4.7	3.2	4.4	3.3	4.0

Table VI.4:Summary Results, Averages (n=19)

Note: Qualitative performance ratings are based on a scale from 1=very poor to 5=very good. Weekends are excluded from response time. Number of questions in each category is shown in parentheses.

Also, as might be anticipated, it took longer to get usable responses to technical assistance questions (60 hours) than information-only questions (37 hours); however, the time to the initial response was similar for both question types. The average response time was much less for residential sector questions than commercial or institutional sector questions. Questions related to lighting and HVAC issues took the longest to get usable responses, possibly because of the complexity associated with these topics. Contact participant type had little effect on the time to the first response. Although it appeared that it took longer for utility participants to get usable responses, we believe that this was an artifact of the data-collection process. As noted earlier, "participant type" was not one of the variables we included in developing our orthogonal design; it was added only after some participants, the questions assigned to utility representatives turned out by chance to be among the more complex ones.

#### **Relevance, Accuracy, and Timeliness of Information**

The overall average ratings on thoroughness, relevance, accuracy, and recentness averaged between 3.3 and 4.0 on our five-point scale. In general, information provided was current and accurate.

When examined across the categories we considered, the ratings were quite consistent within each category (sector, general topic, how question was submitted, information type, and participant type). For example, responses to questions posed by email consistently received higher ratings in all performance dimensions than those submitted by telephone. Among the topic areas, HVAC questions received the highest ratings and questions about renewables usually received the lowest. Within the sector category, questions on the commercial sector usually received the highest ratings and residential received the lowest.

These patterns may be due to the knowledge of the experts at the EIC, how user inquiries are handled, or other factors; it would be useful to examine what might contribute to the differences and explore ways to enhance the EIC's ability to respond to questions where the ratings were lower.

## **Participant Type**

Questions submitted by utility contacts received the highest ratings and those from the private sector and educational institutions received the lowest. On some occasions the EIC informed a participant that they were unable to provide any assistance or could provide only limited assistance. This outcome was not anticipated when we developed our data collection approach, but based on the responses we decided to add participant (i.e., EIC user) type as a factor in our analysis of the results. The reasons given by the EIC staff to participants for limiting service included the following:<sup>27</sup>

- Location: two people were provided with limited service because they were from Oregon
- Sector: two callers were provided limited service and told the EIC only helped utilities

The main theme that emerged from the EIC's responses in these cases was that the EIC was facing funding problems and priorities had been established, spelling out which clients and types of questions they would respond to. On

<sup>&</sup>lt;sup>27</sup> The EIC also told a student that they did not provide their services to students. This is consistent with the EIC Web page, which state that they offer service to "commercial and industrial customers of Northwest utilities." Interestingly, on one occasion, the EIC contact told a participant that the EIC did not provide assistance on topics related to private residence, but they did follow through and provided some very informative materials.

four occasions (of 19) the EIC specifically mentioned that their services were being limited by funding problems.

## **Summary of Findings**

Nearly half of the responses (47%) received very good/excellent ratings (an average rating across all four categories of 4.0 or higher, Table VI.5). These responses were very thorough, reflected strong technical expertise, and provided references to high quality, directly relevant references.

Three of the responses (16%) received fair/poor ratings (an average of about 2.0 or less, Table VI.5). All three of these, however, were contacts where the EIC had informed the participant that, for the reasons given above, they could only provide limited assistance.<sup>28</sup> For these cases the EIC simply suggested visiting a few Web sites or contacting organizations such as the Oregon Office of Energy, and these references turned out to not be very relevant to or helpful for the specific question. When these limited response questions are removed from the sample 40% of the responses are average and 60% are good to excellent.

The ratings of the rest of the responses were considered "average." In general, these responses provided several helpful links to other Web sites, but few sources from the EIC Web site or original syntheses of information by EIC staff.

	All	Excluding	S	ector		
Average Response*	Respondents	"limited response"**	Utility	Other Sector		
Fair/Poor (2.0 or less)	3 (16%)	0 (0%)	0 (0%)	3 (23%)		
Average (2.1 to 3.9)	7 (37%)	6 (40%)	1 (17%)	6 (46%)		
Good/Excellent (4.0 or higher)	9 (47%)	9 (60%)	5 (83%)	4 (31%)		
Total	19 (100%)	15 (100%)	6 (100%)	13 (100%)		

Table VI.5:Distribution of Average Responses

\* Average of thoroughness, relevance, accuracy, and recentness

\*\* Excluding four responses that were told EIC could only provide them limited assistance

We found the information provided in some cases to be exceptionally helpful and unique. For example, a Web site that provided a video on bathroom fans was very responsive to the question submitted and entertaining as well. In several cases, Web sites that were identified by the EIC probably would have

<sup>&</sup>lt;sup>28</sup> Those where no assistance was provided (e.g., two student callers) were removed from the analysis.

been difficult to find using a standard search engine, but they turned out to be both very useful and relevant. Responses to some of the more challenging information requests were very thorough and demonstrated that the EIC staff had performed independent, professional research on the topic.

In one case, however, the EIC staff person who responded did not understand the topic of the question submitted and provided very little useful information. We believe that the EIC could have been quite helpful in this case if the contact person had directed the caller to responses archived at the EIC Web site since we found several that were directly relevant to this question. Overall, there were several cases in which the EIC responses could have been much more helpful if information in the EIC archives had been synthesized or referenced. In some cases, though, the EIC staff did provide links to archived information that was directly on target for the information request.

Minor problems were encountered with the Web site interface. For example, one user was unsure what to do when the response to the question he entered was "Thank you for your feedback." He tried to go back to the data entry screen to determine if he had hit the wrong button by mistake, but then had to go through the entire process from the beginning.

Finally, two questions were related to an innovation receiving funding from the Northwest Energy Efficiency Alliance: the EZConserve computer control software. The EIC appropriately informed the participant about this technology and provided useful technical information.

In summary, our findings indicate that the quality of information services provided by the EIC can be quite good. A substantial proportion of responses they provide are of high quality and demonstrate that the EIC has capable technical experts. However, a small proportion is of poorer quality, due in part to priorities that the EIC suggested that they have established to deal with their funding concerns. In the interest of improving service overall, it is probably worth examining these priorities and then communicating them more prominently to potential users of the services so that user frustration is minimized. Even if it is necessary to prioritize inquiries, however, we believe that it might be possible to provide improved services to a wider audience by drawing more effectively upon the responses already archived by the EIC.

## VII. Development of Usage Reports

As the EIC implements marketing efforts aimed at targeting specific customer segments, it must also pay careful attention to tracking program activities and accomplishments, including:

- Informational needs
- Usage patterns
- Operations management

A careful analysis of these trends can be used to evaluate the efficacy of current and future marketing campaigns, improve program resources and delivery, and implement a Continuous Quality Improvement (CQI) process.

In addition, the Northwest Energy Efficiency Alliance, playing an important funding role to the EIC, has slightly different needs. The Alliance is interested in investigating:

- A regional analysis, to see the percent of program activity in the Alliance territory
- The EIC customer base, to see if target markets are making use of the services
- Other activities, to see if the EIC is serving as liaison to external parties that interact with the Alliance

In an effort to clarify these tracking trends for the EIC and the Alliance, Quantec has prepared numerous examples of tables and charts, each of which is discussed in detail in Appendix H. We have grouped the reporting into two broad objectives, with two sets of recommended metrics to be tracked:

*Annual/quarterly tracking activities with current data sources*: These tables and charts are helpful for examining longer-term trends. The EIC is currently reporting most of this information on a month-by-month basis, or using separate charts for each year, making the identification of trends difficult.

*Additional research/reporting*: In some cases the EIC should consider conducting additional research to help answer important tracking questions, or attempt to develop new data tracking from current sources.

## **Objective 1:** Track the volume EIC uses by method and user segment

## Annual/Quarterly Tracking Activities With Current Data Sources

- Number of EIC Inquiries and Clients (Example 1)
- Percentage of First Time EIC Clients (Example 2)

- Type of Company Using Hotline Services (Example 3)
- Business Sector of Hotline Request (Example 4)
- Total Web Site User Session Summary by Year (Example 9)
- Number of Listserv Subscribers (Example 10)

## **Objective 2: Ensure that EIC staff/materials can meet customer informational needs**

## Annual/Quarterly Tracking Activities With Current Data Sources

- General Topic of Hotline Inquiry (Example 5)
- Mode of Informational Delivery (Example 6)
- Type of Company Using Hotline Services by General Topic of Hotline Inquiry (Example 8)

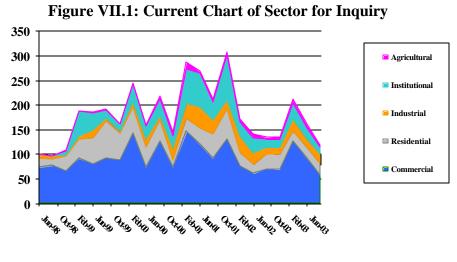
## Additional Research/Reporting

- Tracking of information sought from the Energy Solutions Database (i.e., the equivalent of "general topic" from the Case Management Database
- Detailed reports of information available, by topic, in Energy Solutions Database and Fact Sheets
- Web site usability study to identify ways to make the site more usable
- Survey of Web site users to track user characteristics and experience

## **Example of Current vs. Proposed Summary**

In order to illustrate the difference of the current vs. proposed approaches to summary reports, we include an example below.

In the first example, the EIC is currently using a stacked line chart to present the business sector of the hotline request. While this is helpful for highlighting aggregate increases or decreases in activity, it is extremely difficult to discern trends by business sector. Our proposed chart, using the same data, helps draw attention to relative trends over the four year period, such as the gradual decrease in residential calls and the gradual increase in industrial calls.



Ag and Inst recording began 12/98. CEE ToolKit requests 2-4/99 Institutional.

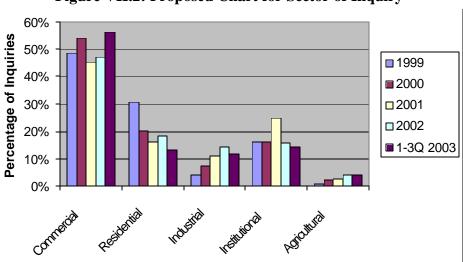


Figure VII.2: Proposed Chart for Sector of Inquiry

# VIII. Conclusions and Recommendations

This evaluation reveals that the EIC continues to achieve a number of the market transformation goals of Alliance funding. Awareness surrounding how energy is used, and the associated energy and non-energy benefits of energy efficiency, continues to increase as measured by increases in overall EIC users, the ease of acquiring information, and the satisfaction among EIC users.<sup>29</sup>

Specific conclusions and recommendations relating to the goals of this MPER are reported below, followed by the EIC's response to key recommendation from the previous MPER.

## **Fifth MPER Conclusions and Recommendations**

The EIC increased use among utility professionals in 2003, but needs to incorporate more suggestions from the marketing consultant. Following the advice of the marketing consultant's report in 2002, the EIC targeted utility professionals through email announcements, direct mailings of information and collateral materials, and presentations at conferences. The impacts of this campaign were evident from the data analysis, including:

- In the first three quarters of 2003, there were a total of 507 hotline inquiries, 41% of which came from utilities, compared to only 25% of utility inquiries in 2002. The average number of utility inquiries from 1999-2002 was 169 per year; in the first three quarters of 2003, however, there have already been 210 utility inquiries.
- Percentage of hotline referrals attributed to EIC marketing jumped dramatically, from only 3% in 1999-2002 to 22% in the first three quarters of 2003.
- The percentage of first-time EIC clients increased from 36% in 1999-2002 to 56% in the first three quarters of 2003.
- Utility hotline callers requesting general EIC information rose from 16% in 1999-2002 to 37% in the first three quarters of 2003.
- A total of 62% of the respondents to the utility online survey recalled receiving at least one EIC marketing piece during the last six months. Moreover, of those who had received marketing materials from the EIC, 82% responded that they had used the EIC, compared

<sup>&</sup>lt;sup>29</sup> Previous MPERs found that users reported that this information was very useful and an important factor in their decision making process.

to only 54% of the respondents that did not recall receiving marketing materials.

### **Recommendations**

- The EIC needs to continually monitor the use of EIC services to determine if the increase in use by utility professionals is sustained.
- The EIC should continue to use low cost means of reaching utility professionals, such as email campaigns and reciprocal web links, but also expand the use of onsite presentations, as suggested by the consultant.
- The EIC should evaluate the cost-effectiveness of different outreach methods to assess how marketing efforts can be best focused, also considering the effects over time and the required frequency to sustain awareness and convert new users.
- The EIC should begin using more key words in the marketing materials. The report suggested keywords like "responsive," "convenient", "comprehensive resources," and "without fee/at not cost." Some of these particularly the fact that the information is available at no cost are not presented in many of the marketing materials we reviewed. The EIC also needs to more consistently promote their mission statement and marketing position on their materials.
- Promote the Web site *and* hotline for utility users. Although utilities are the largest identified business sector in the EIC Case Management Database (24% from 1999-2003), they were second (only 10.5% of users) behind consultants for the online registered users.
- Consider promotional efforts that offer incentives for referrals.
- The EIC should identify and focus on other target markets using similar techniques as those that were used for the utility industry.

## The number of EIC users served continues to increase dramatically.

Although inquiries recorded in the Case Management Database have declined compared to higher numbers recorded during the energy crises in 2000 and 2001, use of the EIC online services continues to increase dramatically. In 1998, for example, the EIC Web site averaged only 1,170 user sessions per month; in 1999 user sessions nearly doubled to 2,000 per month, and by 2002 the EnergyIdeas.org Web site was receiving an average of 20,763 visits per month. In addition, the Alliance1 listserve increased from 971 subscribers at the end of 2002 to 1,359 subscribers at the end of the second quarter 2003, and had an average annual growth rate of 35% since 1999. The UtilityPTR listserv more than doubled in the first two quarters of 2003, increasing from 51 subscribers.

## **Recommendations:**

- The EIC should consider examining other indicators of increased awareness such as surveys of energy decision makers that have not used the EIC to determine if there are additional opportunities for expanding the number of users served.
- The EIC should conduct ongoing tracking to see how the information provided is used in the energy decision making process by instituting systematic follow-up surveys of hotline callers.

*Satisfaction among utility users remains high*. Respondents to the online utility survey continued to be extremely satisfied with the EIC services. For example, 77% agreed or strongly agreed that the EIC provides excellent customer service, and 68% agreed or strongly agreed with the statement: "I use the EIC because I know they have the expertise to answer any energy-related question." In addition, the respondents that had received a PTR factsheet were extremely satisfied with the material they had been provided.

## **Recommendations**:

- The EIC should develop an ongoing tracking system (i.e., an ongoing "dialogue" with customers") to continually evaluate satisfaction among all users, using techniques such as "exit surveys" for both hotline callers and Web site users.
- Collect info on users who sign up for listserv or other services to better understand their information needs.

*The Product and Technology Review is a popular new service for utility professionals.* Respondents who had received information from the Product and Technology Review service were pleased with the information they received. Respondents reported that the information they received was complete, objective, and an excellent resource. However, a few respondents expressed concerns that the EIC may be withholding information that could damage a vendor's reputation with utilities.

## **Recommendations**:

- The PTR factsheets should not be limited to utility professionals and should be made available to others working in energy efficiency.
- The factsheets should be made more readily available by posting on the Web page.
- The EIC should encourage first hand feedback from users of the technologies through either a listserv or by online Web postings (similar to a "usenet" group where readers can post feedback/comments).

• The EIC should establish a feedback system to continually monitor satisfaction with the PTR factsheets.

Although the EIC incorporated many of the recommended changes to the Web page, reactions to the new site were mixed. The EIC re-launched the Web page in January 2003, incorporating many of the recommendations of the 2002 usability study, including:

- Information was reorganized and grouped by topics (e.g., end uses) and business sector
- A site search was added to the home page
- The new page incorporates a new professional/updated look and feel to reflect the high quality information and services the EIC offers.

In addition, as demonstrated in Appendix G, the EIC incorporated many of the changes that were recommended by an expert review of the Web page. In fact, of the 57 expert recommendations, 37 (65%) have been completed by the EIC and 10 (18%) are partially completed.

Despite these changes, however, the responses to the new Web page were mixed: of the 35 online survey respondents that noted changes to the page in the last year, 11 found the new navigation to be more cumbersome and difficult to use than the previous design.

## **Recommendations:**

- The EIC should conduct a follow-up usability study. While the Web consulting firm that managed the usability study (Zaaz) conducted an independent review of the page, the EIC needs to evaluate the new site based on feedback from energy professionals and make additional improvements to the site. This study provides an initial examination of usability with the site, but does not substitute for a comprehensive usability study.
- The EIC should establish a feedback system to continually monitor satisfaction with the Web site. This can be conducted with "pop up" exit survey following use of the page, an online survey, or another method that is considered cost-effective and receives an acceptable response rate.

*The Web registration was helpful for identifying Web site users, but implementation of the registration process needs a careful review*. The Web site received more average visitors *per day* in 2002 (669) than inquiries to the hotline during the *entire year* (661). To understand some basic information about the vast majority of the users, the EIC implemented a registration page in 2003. Some of the findings included:

- Nearly 24% of registrants are employed in the Northwest (Idaho, Montana, Oregon, or Washington). Assuming the registered users represent the population of users, this means that the Web page receives nearly 5,000 visits a month from Northwest users.
- Utility professionals (10.5%) represented the second largest business sector using the Web page, behind consulting firms (13.3%).
- Forty-seven percent of registrants learned of the EIC by performing a Web search, with another 30% being directed to EnergyIdeas.com by following a link on another Web page.
- The registration page, however, was problematic in many potential EIC users were likely deterred from accessing the Web site. A number of factors contributed to the low response rate for the registration page, including the placement (timing) for the page, and the fact that the page may not have clearly identified the benefits of registering.

## **Recommendations**:

- The registration is currently optional, and only 11% of users are completing it. The EIC should consider placing the registration "deeper" in the site or simply removing the page altogether (as the EIC has recently requested).
- The EIC should consider other methods for learning about who their Web page users are, like a "pop up" exit survey, an online survey, or another method that is considered cost-effective and receives an acceptable response rate. These surveys should also provide an ongoing measure of satisfaction for the site.
- The EIC can also conduct additional "data mining" activities with their Web statistics, such as examining the "last click" before users exit the page.

*The quality of information services provided by the EIC can be quite good, but priorities differed based on business type and location*. An independent review of data queries found that a substantial proportion of responses the EIC provides are of high quality and demonstrate technical expertise. The lower quality responses are due, in part, to priorities that the EIC suggested that they have established to deal with their funding concerns. For example, due to budget limitations the EIC focused on serving utilities in early 2003 and customers in Washington State.

## **Recommendations**:

• In the interest of improving service overall, it is probably worth examining caller priorities and then communicating them more

prominently to potential users of the services so that user frustration is minimized.

• Even if it is necessary to prioritize inquiries, we believe that it is possible to provide improved services to a wider audience by drawing more effectively upon the responses already archived by the EIC (e.g., providing links to helpful information on the EIC Web page).

## **Overview of Issues from Previous MPER**

The previous MPER made a number of recommendations. Below, we assess the progress of the EIC in responding to these recommendations.

## Recommendations

*Track EIC Web Page Users*. The EIC should attempt to learn more about its Web site users.

• *Response*: The EIC implemented a registration page in 2003 to collect basic information about Web page users. The EIC needs to evaluate the objectives and implementation of this page to ensure that interested users are not turned away from the site.

Addressing Data Quality Issues. A way to ensure that the data are entered correctly and consistently across all staff is to develop a brief user guide for the database, and to implement data input mechanisms – such as pull-down menus – for as many database fields as possible. In addition, a set of quality assurance standards and checks should be developed and used routinely.

• **Response**: The EIC has not developed a user guide or implemented pull-down menus for the fields identified in the previous MPER. However, the EIC did correct the "Business Type" field to account for business types instead of job types (e.g., if a caller was an engineer at a utility the business type was sometimes misclassified as an engineering firm). Corrections were made for the past two years of data. The EIC should develop a user guide and implement data input verification procedures, such as drop down menus.

*Collect Additional Information for the Case Management Database*. The EIC should consider a careful review of the items contained the case management database, improving certain fields (e.g., expand the referral categories and collect the department of the caller).

• *Response*: The EIC has not responded to this recommendation and should collect this information.

*Review Data Tracking Forms*. The EIC must not only monitor program operations, but also apply a "critical eye" to its own data and routinely examine multiple program usage patterns and measures of marketing efficacy.

• *Response*: While a few new reports were generated in 2003 (based on new Web reporting) the standard reports have not been carefully reviewed for some time, and the EIC should meet with the Alliance to discuss reports that will be most informative for meeting the data needs of the EIC and the Alliance

- *AIACOTE* A private listserv that serves the Puget Sound American Institute of Architects (AIA) and Committee on the Environment Steering Committee to distribute minutes, agendas, relevant environmental information and reports from subcommittees.
- *AIA Council* A private email list for the Puget Sound American Institute of Architects (AIA) and Committee on the Environment Steering Committee to distribute updates, information, event notifications and volunteer requests to the General Committee members.
- *AIA Info* A public listserv maintained by the Puget Sound AIA Committee on the Environment Steering Committee to distribute updates, information, event notifications and volunteer requests to AIA members.
- *Alliance 1* A private listserve that provides Northwest utility staff, Northwest Energy Efficiency Alliance partners, and other interested parties with timely information about Alliance-sponsored market transformation activities.
- **BuiltGreen Newsbriefs** A private listserv created for the Snohomish and King County Master Builders implementing their BuiltGreen program. It includes a monthly selection of articles showing some of the more practical approaches that builders are taking to build sustainably. Links to full text articles are provided.
- **DEI** A public service to distribute updates to people interested in the Northwest Energy Efficiency Alliance's Utility Distribution System Efficiency Initiative.
- *EnergyAg* A public monthly listserv that highlights current news, articles, fact sheets, Web sites, events, and other resources related to agricultural energy. Links to full text articles are provided.
- *Energy Newsbriefs* A public listserv that contains weekly profiles of information that the WSU Energy Library received in energy-related professional journals. Newsbriefs promotes awareness of emerging trends of potential interest to energy professionals. Links to full text articles are provided.
- *Industrial Newsbriefs* A public monthly listserv that highlights current news, emerging trends and other resources of potential interest to energy professionals within the industrial sector. Links to full text articles are provided.

- **Industrial Roundtable** A listserv that is open to all interested persons but is primarily intended for organizations involved in providing services to industries in the Pacific Northwest. It is intended as an extension of roundtable meetings. Goals of this listserv include sharing ideas, questions, and notes on cooperating to promote sustainable industrial competitiveness for the Northwest.
- *ITAPExec* A private listserv for planning purposes of the Executive Committee of Industrial Technical Assistance Providers.
- *LGEnergy* A public bi-monthly listserv that offers energy news for northwest local governments, and references current articles, Web sites, events and other on-line resources. Links to full text articles are provided.
- *UtilityPTR* A private listserv for utility staff to share information about products and technologies reviewed by the EnergyIdeas Clearinghouse and Lighting Design Lab. Review updates will be distributed here by EnergyIdeas and LDL.
- *Washingtonsustainability* A private forum for state or local government agencies and institutions seeking to implement sustainable practices into their workplace. The listserv offers a place to share tips and case studies, news about training opportunities or workshops and to allow for discussion of issues, ideas and difficult questions.

As shown in Table A.1, subscriptions to most of the listservs continued to increase in 2003, some of them dramatically. For example, the Alliance 1 listserve increased from 971 subscribers at the end of 2002 to 1,359 subscribers at the end of the second quarter 2003, and had an average annual growth rate of 35% since 1999. The UtilityPTR listserv more than doubled in the first two quarters of 2003, increasing from 51 subscribers to 104 subscribers. However, some of the older listservs, such as Energy Newsbriefs, experienced more moderate growth, with an increase in subscribers of 7% in 2002 and 9% at the end of the second quarter 2003, but still had an average annual growth rate of 33% from 1999.

Listserv	1999	2000	2001	2002	2 <sup>nd</sup> Q2003	Average Annual Growth Rate
AIACOTE	18	17	16	15	16	- 3%
AIA Council	NA	30	42	41	53	22%
AIA Info	NA	NA	NA	98	103	5%
Alliance 1	422	699	807	971	1359	35%
BuiltGreen Newsbriefs	NA	75	195	223	230	59%
DEI	NA	NA	NA	NA	3	NA
EnergyAg	16	74	136	314	397	151%
Energy Newsbriefs	214	423	504	538	587	33%
Industrial Newsbriefs	NA	NA	NA	NA	49	NA
Industrial Roundtable	NA	NA	72	62	58	-10%
ITAPExec	NA	NA	12	12	13	4%
LGEnergy	50	65	92	133	145	31%
UtilityPTR	NA	NA	NA	51	104	104%
Washingtonsustainability	NA	27	30	31	83	61%

Table A.1Number of Listserv Subscribers

# Appendix B. Final Invitation and Survey Instrument

## Invitation

I recently spoke with Elaine Miller at the Northwest Energy Efficiency Alliance, and she recommended that I contact you. We are assisting the Northwest Energy Efficiency Alliance in assuring that their energy efficiency information resource program, the Energy Ideas Clearinghouse (EIC), meets the energy-related information needs of the utilities they serve. I would appreciate it if you would take a few minutes to answer our brief on-line survey to determine your energy-related information needs and preferences.

We also need input of others who need and use energy-related information in utility companies. You could be of great assistance to us by forwarding this message to other people in your company who could give us feedback on information sources they use as part of their jobs.

The survey will only take 5 minutes, and will be valuable for determining the future direction of the EIC. You can find it by simply clicking on the link below:

http://216.210.230.76/surveys/2003-09/nr/q1.html

As a token of our appreciation for your participation, you will be entered into a drawing for a \$100 Amazon.com gift certificate! Thank you for your assistance, and please contact me if you have any questions.

Sincerely,

Adam Knickelbein Analyst Quantec, LLC 303.998.0102 adamk@quantecllc.com

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## **Final EIC Utility Online Survey**

This survey is sponsored by the Northwest Energy Efficiency Alliance, which is a not-for-profit organization that works to make energy-efficient products and services available and affordable to the Northwest region's consumers. The Alliance wants to better understand energy information needs of electric utility companies.

You have been proposed as one of your company's employees who is likely to have a need for energy efficiency information as part of the work you do. We are asking you to provide the Alliance with feedback about your energy information needs in order to assure that services the Alliance sponsors provide valuable information to electric utility companies in this region.

# The survey has 15 questions and will take approximately five minutes, and all information is confidential.

## Thank you in advance for your feedback.

- 1. What state do you work in?
  - California
  - o Idaho
  - o Montana
  - Oregon
  - $\circ$  Washington
  - Wyoming
  - Other (Specify \_\_\_\_\_

)

- 2. What utility company do you work for?
  - Avista Utilities
  - Benton County PUD
  - Bonneville Power Administration
  - Clark Public Utilities
  - Cowlitz County PUD
  - Eugene Water & Electric Board
  - Flathead Electric Cooperative
  - Grant County PUD
  - Idaho Power Company
  - Montana Power Company
  - PacifiCorp
  - Portland General Electric
  - Puget Sound Energy
  - Salem Electric
  - Seattle City Light
  - Springfield Utility Board
  - Tacoma Power
  - Other (Specify \_\_\_\_
- 3. What department do you work in? (Check all that apply)
  - Energy services
  - Conservation
  - Engineering
  - $\circ$  Human resources
  - Customer service
  - Other (Specify \_\_\_\_\_)
- 4. Do you have a need for energy efficiency information as part of your job?
  - Yes
  - $\circ$  No
- 5. Do you provide energy-related information to customers?
  - o Yes
  - o No

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- 6. Have you heard of the Energy Ideas Clearinghouse, also known as EIC or EnergyIdeas.org?
  - Yes, I have heard of the Energy Ideas Clearinghouse, and have used it.
  - Yes, I have heard of the Energy Ideas Clearinghouse, but have NOT used it
  - No, I have not heard of the Energy Ideas Clearinghouse [TERMINATE]
  - Not sure [TERMINATE]

#### [IF Q6=1 (USED EIC) OR Q6=2 (AWARE OF EIC)]

- 7. How did you first learn about the EIC? (Select only one)
  - Word of mouth
  - EIC booth or presentation at conference
  - Ad in journal/magazine/newsletter
  - Came up on Web search
  - Found link on another Web page
  - Direct mailing from EIC (Postcard or folder)
  - Other (Specify \_\_\_\_\_)

### [IF Q6=1 (USED EIC)]

- 8. Which of the following EIC services have you used during the last 12 months? (Check all that apply)
  - Called the EIC telephone hotline
  - Emailed a question to the EIC
  - Accessed the EIC EnergyIdeas.org Web site
  - Received Energy Newsbriefs, or another EIC sponsored listserv
  - Requested product or technology review
  - Other (Specify \_\_\_\_\_)

#### [IF ACCESSED WEB PAGE ON Q8 THEN ASK]

- 9. Have you noticed any changes to the Web page over the last 12 months?
  - Yes
  - o No
  - Not sure

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#### [IF YES THEN ASK]

9a. Do you think these changes make the Web page easier to navigate? Please explain.

#### [IF PRODUCT OR TECHNOLOGY REVIEW NOT CHECKED IN Q8]

- 10. Are you familiar with the EIC Utility Product and Technology Review service?
  - Yes
  - o No
  - o Not sure

#### [ASK ALL THOSE WHO HAVE USED THE EIC (Q7=1) AND ARE AWARE OF PRODUCT AND TECHNOLOGY REVIEW, Q8 OR Q10]

- 11. Have you contacted the EIC regarding the utility Product and Technology Review service?
  - Yes
  - o No
  - Not sure

## [IF Q11=YES]

11a. Did the EIC (or Lighting Design Lab) prepare a fact sheet for you?

- Yes
- o No
- Not sure

#### [IF Q11a=YES]

11b. Were you pleased with the fact sheet? Why or why not?

#### [IF Q11a=NO/NOT SURE]

11c. Why did the EIC not prepare a fact sheet for you?

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**EIC Market Progress Evaluation Report** 

- 12. Have you received any of the following materials from the EIC during the last six months? (Check all that apply)
  - Email on utility Product and Technology Review service
  - Postcard on utility Product and Technology Review service
  - Postcard announcing new EnergyIdeas.org Web site
  - Postcard on Energy Newsbriefs listserv
  - Package of factsheets, notepads, pens, and Product and Technology Review information

.. ...

- Summary of recent hotline requests
- Actual factsheet from the Product and Technology Review
- Have not received any of these materials

## [IF Q7=USED EIC]

13. Please rate how strongly you agree or disagree with the following statements

	Strongly Disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly Agree 5	Don't Know/ Not Applicable to my job
EIC provides excellent customer service.	0	0	Ο	0	О	0
EIC is the first place I go for energy-related information.	О	0	Ο	0	О	Ο
I use the EIC because I know they have the expertise to answer any energy-related question.	О	0	0	О	0	О
EIC Librarians provide high quality research services.	О	О	О	О	О	0
EIC consultants provide high quality, useful responses to energy-related questions.	0	0	О	О	О	0
I often refer my customers to the EIC to get their questions answered.	О	О	О	О	О	0
I often refer my colleagues to the EIC to get their questions answered.	0	0	0	0	О	0
EIC develops high quality fact sheets on energy efficiency topics.	0	0	0	О	О	0

## [IF Q7=USED EIC]

- 14. What additional comments or impressions do you have about the EIC?
- 15. What is your email address? [For survey follow up purposes only, your email address will **not** be added to any lists or shared with anyone.]

Thank you for your time!

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# Appendix C. General Comments about the EIC

## What additional comments or impressions do you have about the EIC?

- Like the EIC, use the EIC, recommend the EIC. Would like to start seeing actual case studies from utilities on past projects.
- Will try to use the EIC more often they have not been high on the radar screen as a potential resource for handling residential and small commercial conservation issues up to now.
- I have used EIC information over the years and am very pleased with it.
- Keep up the good work.
- On a couple of occasions I have asked questions about the effectiveness of a particular vendor's products to determine the validity of the vendor's marketing materials. EIC seems to shy away from allowing dissemination of responses that might negatively reflect on a vendor's product.
- The time it takes to receive information back takes way too long.
- I simply don't have it on the top of my mind.
- They are a good resource. Thanks.
- Sometimes the research questions I ask come up very short.
- I am no longer in Energy Services at Tacoma Power, so I no longer have a direct need for the services of the EIC. When I was using their services, I was impressed with how responsive they were and what a good resource for the region they represented. I was an advocate for my utility's financial support for the EIC.
- Staff is thorough, dependable, proactive, and professional. They are one of my best resources when assisting customers.
- We appreciate and value the review of "black box" technologies that periodically circulate within the region. Most of these have no energy conservation value, but it places the utility in an awkward position to bluntly communicate that to customers. The EIC serves as an independent third-party for these situations.
- It's so difficult to find the right fit for a web page. Our coop struggles with this everyday, trying to find the right formula and flow, so that our Web site is easy to navigate. What does the consumer want when they access the site? There is a tremendous

amount of information at the Web site and no matter what, we are grateful that it is there!

- I don't hear anything from them for months on end. A monthly status of reviewed technology would be helpful.
- I just don't use EIC enough to be able to answer most of the questions. I do get an email from someone with energy efficiency tips short ones which I use sometimes in our company magazine.
- EIC is a good service. Unfortunately I don't take advantage of what they offer on a regular basis. We used it more in the past, but changes in our utility have limited our involvement.
- I probably need to understand more clearly the products and services offered by the EIC.
- I would like quality technical engineering reviews of customerproposed energy efficiency upgrade projects in the industrial arena.
- Keep it going. It's a good resource.
- I don't use it that often.
- Individuals I have spoken with have been very helpful. Good customer service and informed people.
- I would use this service more often but do not get a lot of new and unusual questions that need to be answered. Most of my customer's questions are repetitive with similar answers.
- It has become my one-stop shopping mall for information.
- It would be very useful to have the EIC become more active in producing product technical reviews that aid utility staff in assessing whether devices like motor voltage controllers, artic master units and similar types of devices do produce energy savings that correspond to vendor's claims. There is real need for this type of expert product assessment to ensure that both vendors and utility customers are given professional responses to their respective inquiries to utilities.
- The EIC is one of many resources we use for information and materials. I've been very pleased with all of the help I've received over the past several years and have found the staff to be highly trained, professional, and very responsive to my requests. Thanks, Gary
- I do really appreciate the help I've received when I've emailed a question, or called on the phone. The response (usually over the phone) has been prompt and very thorough. I think this is an excellent service, and one I hope to continue accessing.

- Our staff sends some of our customers to EIC, and I used it personally, and found it was helpful, quick, thorough, I and very impressed. Thanks for asking.
- Keep up the good work!
- I appreciate the quick response I get to my questions, and the referrals to others who can help me.
- I just think the initial information pop up window can be annoying, but does not inhibit my ability to use the Web site.
- I was impressed with the prompt follow up to my inquiries. The information received was detailed. I even had a follow up on one of my questions clarifying details that they didn't have quite right the first time.
- In regards to question number 12<sup>30</sup>, I don't recall which of the items I have received in the last 6 months. Please make sure I am on all of your lists for receiving products and information. Thanks!
- Great service. I appreciate their prompt response to my needs, and they do an in-depth review and research on energy topics. I also appreciate the documents posted on the web for review when I am in need of quick information. I often refer my customers to the site as well as my team members when they are looking for information on an energy topic. Thanks for wonderful support! --Betsy Pahut, Northwestern Energy, Butte, MT
- I have found my interactions to be productive and the customer service was excellent. I am encouraging staff to utilize the service more often. Perhaps, there should/could have been an open-ended question about how the EIC could improve their service or an opportunity to identify any seeming gaps in the service.
- How do I submit a product for review?
- EIC is a great service.
- It's a good organization and should continue as is.
- Keep up the good work . . .
- I'm new to the industry, but I'd say that this resource has more potential than I realize. I'd like to understand the available services better. It sounds as if there's a lot more that I could use for our projects and customers, and that much, if not all, of it is currently funded by NEEA.
- Most of my work with EIC has been in the past.

<sup>&</sup>lt;sup>30</sup> "Which of the following EIC materials have you received in the last six months?"

- I think this is a valuable utility resource.
- The EIC provides good information, but I don't always have the time to read all the emails.
- Generally, I rely on the email updates and simply click on the ones that interest me (Lighting). Other than that, I typically forget to go to the home page and look for other information. I will likely make it a habit to check it out more often and familiarize myself with the site better.
- I think it's a great resource for information. As I recall, the several times I've used it, I had to wait for a week or so to get a response, however.
- Most of the topics addressed are commercial in nature and my customers are mostly residential.
- I appreciate your efforts, please continue!
- All in all, good job!
- EIC provides a great service for utilities on many different topics that would be difficult to gather information on, unless you had a lot of time and knew exactly where to go.
- I have not used the services offered by EIC to the fullest advantage. Out of habit.
- This is an invaluable service to the region.
- EIC is the place I go to when I am asking the hard questions. The easy stuff I can get anywhere, but they have good answers for the questions that everyone else replies with "That's a good question."
- Lots of great information.
- I have only been to your Web site once looking for information about energy efficient lighting, specifically for a church in our area that is looking to make some energy efficient changes to their buildings. They are on a very limited budget and are looking for some advice that doesn't cost a lot of money. If you have any suggestions please email me at kfleming@dcpud.org. Thanks.
- I have appreciated their willingness to post various BPA/Energy Efficiency Conference information in the past, present, and future. This Web site is very useful and I hope that more people use it and can learn about its value.
- For me, there is just not a good and constant marketing message from EIC to let me know what is available and how to get the information.

- What I have seen produced has been good quality. However, due to concerns about litigation, the EIC doesn't seem to be able to produce really useful information about some of the more controversial product technologies. Since we (utilities & their customers) are paying for the EIC, I'm personally disappointed in the lack of support in this area.
- Excellent resource that could be utilized much more by myself and my staff.
- It seems like what used to be a lightning fast turnaround on information requests has slowed some.
- Good resource.
- The information on energy efficiency is comprehensive and easy to read and understand. I have handed out information taken from the EIC Web site to customers. Thank you for providing this information.
- Splendid, prompt, and helpful.
- EIC in Olympia tends to be "out of sight out of mind" with me, but the LDL is close/more visible, and I frequently refer customers/colleagues there. (My survey answers were largely with the LDL in mind.) Thank you!
- The EIC is not a very visible organization. I'm unsure of just exactly how I go about getting in touch with EIC. I'm unsure of just what I would go to the EIC for?
- Very useful information source
- I might use the EIC once or twice a year, but have been satisfied with the service.
- On my current job, I do not use the EIC very much. Formerly, I worked in Commercial and Industrial Energy Conservation and I found the EIC very useful. The staff was friendly and professional.
- I visit the EnergyIdeas.org Web site every day I have access to the Internet, normally five days a week. Even if Today's Q & A isn't applicable, it's interesting to see the energy questions and answers of other utilities and consumers. I hope I haven't confused your printed materials with those of the Northwest Energy Alliance.
- A great organization with great people who do a heck of a job answering queries. I wish the service regarding residential efficiency was as good and in-depth as it is for commercial and industrial. The EIC is a great, great resource; I wish it's primary funding partners weren't so occasionally myopic when they draft the EIC statements of work. Don't let the Alliance board members keep you out of

residential-they don't provide services to their native residential consumers, so the EIC should be able to.

- Has gotten more technical.
- I would like the PTR process to continue and to be able to provide fact sheets regarding devices with questionable energy savings claims.
- Our main focus for the EIC are lighting, and the reviews of commercial and industrial audits to verify that they are reasonable. Our department does not have the engineering experience to evaluate audits. We also don't have the facilities or resources to evaluate and recommend proper lighting design.
- I find the EIC (both Web site and phone) a very useful tool in researching responses to my customers' questions.

# Appendix D. Comments about the EIC Web Site

Do you think these changes [TO THE WEB SITE] make the Web page easier to navigate?

- I have thought that the EIC has always been relatively easy to navigate through.
- Nicer look on the home. Seems similar underneath, but faster.
- Yes, the changes are fine.
- Easier to find the information I am looking for and not as cluttered
- Yes, the site is less cluttered.
- I've used it to get phone numbers and addresses mostly, to give to people as contact points.
- I was involved in a survey on the Web site and was asked how it could be improved. I don't think the changes make it any easier to navigate. I especially have a hard time finding the WA State energy code. I feel it might have been easier before the change. I also miss the search feature that I do believe was on the main page. Anyhow, searches seem more difficult than before. I hate to say it, but I like the old web page better. Regardless, we send our members there and advertise the site as well. It's an excellent resource.
- I like the design but really do not see any true functional change.
- Have not used the sight extensively enough to comment
- The site is easier to move around on and seems to be organized in a more logical way.
- Do not remember having difficulty with either.
- They are great.
- I do not usually find the information I want on the Web, so I call the hotline for the help I need.
- For the most part I think the new design has made it easier to navigate. I have a tough time finding the old "Tip of the Day" link. Maybe this was stopped. Sometimes the customer information pop up box is annoying.
- Yes, easier to find information needed in a timely manner.
- Better layout. Good to have a few news links up front (new stuff)

- Yes and no. The front page is clearer and more professional, but I find the topic pages with categories and search results VERY confusing. I used to get to basic information much more quickly in the old site.
- I liked the "search" option on the old Web site. I have asked for this option to be installed on the new site before. The new site has more information, but it harder to use.
- They seem to.
- For the most part, yes. I often find it difficult to use the search command.
- I don't use the site often enough to make a good comment. Generally, I feel that the site is well designed.
- Yes.
- Yes, the site is much more user-friendly!
- No. I think that the look has changed but the basic functionality has remained about the same.
- Have not used it enough to comment.
- No, the look changed however the functionality did not improve from my perspective.
- No. I preferred the older style search method, which made it much easier to find information on whatever I needed at the time. The current web page search tool isn't very Google-like.
- Yes.
- Yes, it is easier to find topics and to move through the site.
- I like the changes, but now I have a tendency to wander around in your Web site looking at other things instead of what I started out looking for.
- Not sure.
- Yes it is easy to get around and find what information you want to read.
- Yes. It is easier to find the topic I am looking for.
- 1. The link I used is no longer active. I now go thru the WSU site. Have to take time to look around for EIC. 2. It takes a long time for the graphics to load, even with a fast Internet connection; perhaps it's the WSU server. 3. Several things have changed; e.g. I have not figured out how to search by date in the Events section; I have to go from page to page until the date range comes up, and the "nearest"

dates are at the end of all this. Inefficient design; the old one was easier. 4. Haven't used it much since the change."

- Have insufficient knowledge to make a comparison, but the current format looks fine.
- Sometime ago, I participated in an in-person input session about the EIC at a local consultant's office. Myself and others provided suggestions about organization of information, links to other sites, etc. Since then I have seen some of our ideas implemented which have made navigating easier.
- I usually use the search engine to find the specific topic I am looking *for. I like the fact sheets and use those frequently.*
- No. It seems more difficult to access the information with the new format.
- I am not a regular user and it usually takes me several tries to find the right area for what I am looking for.
- The new format is attractive but I miss the "Tip of the Day".
- Yes.
- No, and it seems that the information is primarily from government sources. It seemed the prior was aimed more at the common customer user.
- I actually found the Web site a little more difficult to find the information I was looking for. It seemed like in the interest of giving me additional search options, it's become harder to find information. Instead of searching for a specific topic, I needed to tell the search engine where to look -- residential, commercial, industrial, etc. I also later discovered that information was available on the Web site, but my search had not uncovered it. It just seems like the Web site has gotten more complex than it needs to be.
- It used to be easier to zero down to the appropriate category of interest.

# Appendix E. Comments about the Product and Technology Review

## Were you pleased with the fact sheet? Why or why not?

- Yes It served its purpose of explaining what I needed to know.
- Yes it's nice to have the resource.
- I have had two fact sheets prepared. They were both very helpful.
- Yes.
- Yes. We use the EIC to provide reviews of technologies that we don't have significant experience with, or to review "black box" technologies.
- I was interested in the Retrolux product from Westinghouse, but the fact sheet and the response from the Lighting Design Lab were enough to convince me to hold back. I still think with changes to the product to allow local control, it might be a viable technology, but the Lab considers it a flawed product. I think some follow up could be useful.
- Yes I was. They did a good job of researching my question and providing me with information.
- Yes. I could have used more specific information that I had requested but what was given was helpful.
- This is a difficult question to answer. I had heard via word-of-mouth that the product I asked about had several problems and that one utility that had used the product in their new offices had replaced them all. However, the written review I received had no mention of poor performance. I think that's a problem.
- I was pleased.
- Yes, the information was very complete and they had good follow up.
- It was pretty vague. It didn't tell me too much that I didn't already know.
- Yes, they have always done a great job.
- I have found that my own web searching is often faster and more to the point than going through the EIC.
- Yes, this is an excellent resource for BPA and our customers.
- Yes, very objective product reviews.

- Yes, [IT GIVES] helpful information, and I added [THE EIC] to my references so customers I advise know the facts I relate are not just from me.
- I would give the overall PTR effort a letter grade of C satisfactory for content, and D - unsatisfactory for execution. The information has been closely held due to "liability" concerns making it inaccessible for many. Users have raised issues regarding distribution of the documents. In cases, users were provided only hard copies of the PTR's. Barriers to the dissemination of information are unacceptable for an "energy ideas clearinghouse". The information is of acceptable content; however, there has not been a sufficient gateway provided to access the reports or to gather other relevant information on a specific product (e.g. Esource, EPRI, DOE, University studies, other content). This should be handled by providing links to relevant Web sites and documents. The information needs to be easily accessed via the Web site to be usable. Furthermore, there is not a clear process for identification of PTR's requested, in progress or published. The PTR effort has a lot of potential to serve the needs of utilities and others seeking to establish the credibility of vendors' claims for energy saving devices. It could be developed in such a way that individuals could contribute to the body of information gathered on any particular technology, and be made to benefit not only utilities but consumers and responsible vendors/manufacturers.
- Yes
- Well written and documented.
- Yes.
- They looked for power line carrier companies for me.
- Yes, we received all the information we were looking for.
- Yes. It provided the information in a format that was easy to share with the customer.
- I have been very pleased with whatever assistance I have received over the years.
- Yes, it always makes it easy to give valuable information to our customers.

## Date: INSERT DATE

To: INSERT NAME

From: Allen Lee and Scott Dimetrosky

**Re:** Energy Ideas Clearinghouse Data Review

Thank you for participating in the Energy Ideas Clearinghouse data review study. This memo will provide background information on the EIC, the goals of our study, and the protocol we'd like you to follow.

## EIC Background

Since 1990, the Energy Ideas Clearinghouse (EIC or Clearinghouse) has served energy professionals in the Pacific Northwest by providing fast, centralized access to comprehensive and objective information and technical assistance on energy-related topics.

The Clearinghouse currently offers three primary services: a telephone hotline, a Web site (www.energyideas.org), and a number of energy listservs.

Customers served by utilities in the Pacific Northwest can call (toll free), email, or fax questions concerning energy use into the Clearinghouse hotline. Topics include (but are not limited to) motor systems, HVAC, industrial electrotechnologies, life cycle cost analysis, computer simulation, energy policy, agricultural energy issues, and cogeneration. Responses to questions, usually within eight hours, can take a number of forms, including:

- A literature search Publication or fact sheet
- Product or pricing information
- Engineering assistance or analysis
- Referrals to other energy programs, services, or resources

## **Goals of the Study**

Quantec has conducted four evaluations of the EIC, including surveys of users and nonusers, Web site usability studies, and benchmarking studies. The purpose of this study is to review the quality of the information that the EIC provides to its users. Therefore, we have developed a number of inquiries on varying topics to submit to the EIC via the telephone hotline and Web page. We are asking a group of people to submit specific

## quantec

questions to the EIC and then share the EIC responses (and an evaluation of the responses) with us.

## **Research Protocols**

In order to standardize our research, we ask that you closely follow these protocols:

- You have been supplied with a numbered question (or questions) to submit to the EIC, and the mode (email or telephone) to submit the question. Please use the mode specified for each question. The EIC can be reached as follows:
  - For telephone contacts use this phone number—1-800-872-3568 (Monday-Friday 6 a.m.- 5 p.m. Pacific)
  - For emails go to the EIC website, <u>http://www.energyideas.org/</u>, and click on the "Ask An Expert" button and enter your question in the space provided
- Please submit these questions under your own name and, if required, organization (such as your company or university), not the Quantec name. Be prepared with a "cover story" for why you are asking the question if the EIC contact person wants to know. Please indicate that it is for your own needs (for example, for a project at your university, research for your job, etc.). Our goal is to mimic the "mystery shopper" methodology so that the EIC is not aware that these questions are being asked on behalf of the program evaluator.
- Please ask these questions as closely as possible to the way they are written in the attached document. If you are asking the question by phone, you may want to change the wording to make it more conversational. If you have any question about the meaning or intent of the question or would like to change the question significantly, please contact Allen Lee as indicated below.
- We expect the level of knowledge will vary across the group of people asking these questions, but this is true for the people who have used the EIC in the past. We want you to be comfortable asking the questions. If the person at the EIC who responds to you asks you for more details and you do not know how to respond, tell them you will get back to them and then contact Allen Lee to discuss how to follow up.
- Please record the information listed below on the attached sheets. Note that we've broken the documentation into two tables. In the first table, please document all information that you receive in response to your initial inquiry; for example, you might receive a callback, then an email, and then publications in the mail. If you need to make a follow-up inquiry to get clarification or supplemental information, please record your inquiry and document the responses you receive in the second table. If additional inquiries are required, please fill out a table for each one. The information needed in both cases includes the following:
  - The question/inquiry submitted: On the "Initial Inquiry" sheet, you will enter the original question that we provided and its question number. On

the follow-up sheet, enter the original question number and the text of the follow-up inquiry about that question.

- Date and time question/inquiry was submitted to the EIC
- Mode question/inquiry was submitted (phone or email)
- Date and time response(s) received
- Contact person at EIC (person answering the phone or emailing a reply)
- Mode response(s) received (phone, fax, email, postal mail)
- Type of information received (oral comments, fact sheet, referral to Web, brochure, etc.)
- Detailed description of information received and your comments on how relevant it was to the question (please be as descriptive as possible; if information was delivered over the phone, please record as accurately as possible).
- Please use Word to enter the information on the sheets. Feel free to add more rows to the tables if necessary.

A completed example table is included at the end of this document. Please send all materials you received from the EIC, including any emails (and attachments), hard copy information, or faxes to Allen Lee at the Quantec office (6229 Milwaukie Ave., Portland, OR 97202, allenl@quantecllc.com, Ph: 503-228-2992, fax 503-228-3696).

# **Initial Inquiry to EIC**

Question Submitted (number and text):

Submitted to EIC: Time\_\_\_\_\_ Date:\_\_\_\_\_

Mode (phone or email):

Your Name:\_\_\_\_\_

Phone Number:

Responses from EIC to Initial Inquiry

Response No.	Date and Time Received	EIC Contact Person	<b>Mode</b> (phone, email, fax, or postal mail)	Type of Information (e.g., fact sheet, referral to Web, brochure, etc.)	Detailed Description of Information and Comments on Relevance
1					
2					
3					
4					
5					

### **Follow-Up Inquiry to EIC**

Follow-up Inquiry Submitted (number of original question and text of follow-up inquiry):

Submitted to EIC: Time\_\_\_\_\_ Date:\_\_\_\_\_

Mode (phone or email):

Your Name:

Phone Number:

Responses from EIC to Follow-Up Inquiry

Response No.	Date and Time Received	EIC Contact Person	<b>Mode</b> (phone, email, fax, or postal mail)	Type of Information (e.g., fact sheet, referral to Web, brochure, etc.)	Detailed Description of Information and Comments on Relevance
1					
2					
3					
4					
5					

## Initial Inquiry to EIC (EXAMPLE)

**Question Submitted (number and text)**: 1. Has hydrogen been used to fuel internal combustion (auto) engines? What about combinations of hydrogen and gasoline? What are the costs and environmental impacts?

Submitted to EIC: Time 10:00 a.m.Date: 02/28/03Mode (phone or email): email

 Your Name : I.M. Curious
 Phone Number: 800-321-0000

Responses from EIC to Initial Inquiry

Response No.	Date and Time Received	EIC Contact Person	<b>Mode</b> (phone, email, fax, or postal mail)	Type of Information (e.g., fact sheet, referral to Web, brochure, etc.)	Detailed Description of Information and Comments on Relevance
1	4 pm, 2/2/8/03	T.R. McCoy	Phone call	Technical statistics; descriptions, opinions	Provided the size of a cylinder required to hold hydrogen compared to gasoline tank, problems of embrittlement when hydrogen is stored in steel containers, overall storage problem since hydrogen density is very low. Provided more information on natural gas use instead of hydrogen and fleets using NG. Noted could mix hydrogen in natural gas pipelines. Provided no specifics on hydrogen or hydrogen/gasoline use in car engines. Provided no cost or environmental impact data.
2					
3					
4					
5					

# Appendix G. Responses to Expert Review of Web Page

ZAAZ: EIC Usability Review Findir	ngs Spreadsheet	Severity Rating			
WSU Energy Program	1	Major usability problem: critical to the user experience - major barrier			
Energy Ideas Clearinghouse	2	Major usability problem: problematic but did not ruin the experience			
12/13/2002         3         Minor usability problem: less important to fix - low priority					

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
1	Global	Page load times are long	1, 2	On a home machine using DSL, loading the home page takes about 13 seconds. Loading the main "Topics" page takes 4 seconds. Refreshing the page after selecting a sub-topic takes 3 seconds.	Search box also produced long load times. Talk to designer about lightening the weight of this page to	Initial home page load time has been reduced to a "reasonable" level. However, we are planning to make further improvements as budget allows. Search design improvements were done.
2	Global	Font size too small	1	Font size is very small for target audience (middle aged people, assuming)to read. The small font size would most likely hinder recognition that search results are changing after a user selects a "narrowing" link from the top section.	Enlarge font size	Done
3	Global	"Format" a vague term	2	diverse group of materials for your	Brainstorm other words for Format. What about "Content Type"? Also consider other organizational logic; subgroups beneath Format, perhaps.	Done

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
4	Global	Organization of upper section(s) of Topic/Business Type/Format/Jobs/Events pages	1	Need to establish a clearer and stronger cause–and-effect link between choosing a topic and have list of results change.	Improvement could be as easy as a line of instruction in the colored section(s) explaining the effect that choosing a link has on the lower table of results.	Added instruction line, still needs improvement
5	Global	Breadcrumbs used as Page Titles	2	Use breadcrumbs in <i>addition</i> to page titles: breadcrumbs provide context, page titles provide description and sense of page's purpose.	Add page titles to these pages if possible.	done
6	Global	Length of footer too long	2	There's currently 6 lines [counting 2 lines of space] of footer that could be combined into two, possible one. [Finding from Study I]	Combine webmaster contact link, last update, and legal info into one line of links.	DoneReduced size of footer effectively
7	Global	Browser Title is same for all pages on the site	2	More descriptive is better. Unique, or fairly unique, browser page titles will improve results in both external search engines and EIC's own search site functionality.		Still studying this. Very technically difficult due to database structure. We are figuring out how to make the "keywords" in the database the metatags for external search engines. Not likely to be accomplished in 2003, but will be in 2004 with anticipated budget.
8	Global	Sidebar links need different grouping	3	The left sidebar on the 2nd level pages uses different grouping than is used on the home page.	There are possible changes to be made to the home page link groups; once those are finalized, make sure that the left sidebar uses the same grouping logic for consistency and hopefully improved navigation through the site.	Partly done. Further changes to make it more consistent will be completed in 2003 or early 2004
9	Global: Results Table Design	Results table needs improved layout	1	Tables listing links to content could have a clearer layout to improve reader comprehension.	See below for specific recommendations	

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
9a	Global	All results are already on page on first visit to Topics/Business Types/Formats/Jobs/Events pages	2	The first ten results of all returned results already appear when a user lands on a lower level page. When a user narrows their search down more, a result to their action is not immediately apparent because, again, ten results appear.		Changed to display 50 results. Are still working on adding "instructions" while keeping search results "above the fold". Must balance this effectively.
9b	Global: Results Table Design	Table Lacks Title	2	Table lacks a descriptive title; previous/next navigation takes up that space.	Put in a title. Its purpose outweighs importance of keeping everything above the fold. Move previous/next navigation closer to number of results so that readers can get a sense of how many "Next" pages they will see. All these changes will provide more context for readers to understand amount and scope of content.	Done
9c	Global: Results Table Design	Placement of "Results Returned" Number too distant	2	The placement and size of this results number makes it less visible than it should be. Remember this is the ONLY hint they have about the number of articles/events/etc. in their topic of interest. Thus it is an important piece of information.	By either moving it in closer to main content or moving the navigation closer to this results number, readers should notice it more easily, thus giving them clue to amount of results. Instead of raw results, would it be possible to list number of pages, given current display amount per page, and include paging navigation with the number of results returned?	is now displayed at the top of the search results in the title bar

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
9d	Global: Results Table Design	Date column important, yet seldom filled.	2	This date column has very visible real estate, but not every table entry has a related date.	Consider moving the date column to the end of the table, so the absence of date information is not made so obvious. Or, since Study I found that dates were important, try to add more dates to results.	Content folks are adding the dates. Probably 60% done.
9e	Global: Results Table Design	Function of EI column in tables	3	Perhaps this is a result of the beta state of the site, but use of this column is unknown	Omit or make more clear why this column is here and how it will make the user experience better.	Removed
9f	Global: Results Table Design	Function of hyperlinking column titles	3	Clicking on column title links probably orders the results; however, once it's clicked it becomes non-linked so there's no way to return to previous order logic.	Consider making this hyperlink a toggle-type link; one click orders it by format, a second click on the same link returns the list to its previous order logic. Users may click headings without understanding the effect, and want to return the list order after they notice the change.	Done
10	Home Page	Regional News links are unreadable	1	This link text is unreadable on my screen even when set to 800x600.	Enlarge text! Events were ID'd in the first study as most important content	Done
11	Home Page	"Funded by" icon and Text Illegible	1	This icon's text is too small to be read	Enlarge if at all possible.	Improved but dependent on required logo usage at Alliance and WSU
12	Home Page	Site Map link placement under the Search box	2	Placement makes it look like it's describing Search	Move the Site Map link to avoid confusion. Consider moving it to the footer.	Done
13	Home Page	Home page links could be grouped slightly better	2	Links to more static information have been grouped with more dynamic, changing links. So, a link to such static info as "About Us" been coupled with "Today's Feature".	What was reasoning behind this? I'd suggest putting "About Us" in lower yellow nav bar, move "Today's Q& A" up next to "Today's Feature".	Will be completed with new home page design, has been addressed on all secondary pages

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
14	Home Page	Descriptive title above left- hand links could be larger and have a better color contrast so readers notice it before clicking on links; could help their paths through site	3	Make this title larger in comparison to its sub-titles, "Topics" and "Business Types". Though the following headings are clear, it's optimal to have directions stand out from other text.	5	Decision not to address. Must balance use of real estate and keep the home page design above the fold. Browse and search functionality are different, so we must retain the terms "browse" and "search".
15	Home Page	Box and Search button slightly off from each other	3	The text entry box and "Search" button are not aligned	Before site goes live adjust alignment of the two elements.	Done
16	Level 1 Browse/ Search Main Page	Explain what Search Results appear on main page and how they might change with selections made from the main topic/type/format sections.	2	Showing Results before a choice has been made makes the next step confusing because no change is immediately obvious. This is because text is too small to perceive different titles, and the number of results is also too small and placed too far away from main table info.	Make it clear through short instructions and table titles that on this main Topics page, all information is listed in the table that pertains to this topic. Also clarify that making further choices will narrow down the list results.	Done, but we are considering further improvements to "instructions"
17	Level 1 Browse/ Search Main Page	List Order affected by use of quotation marks	3	Items in the table whose titles begin with quotation marks appear first in the alphabetical list.	If titles are in your control, consider deleting quote marks to aid users who are using the alphabetical logic to find items [and not considering quotation marks]	Done
18	Level 1 Business Types page	"Agriculture" filter filters out some agriculture-related content	2	One can find events under the "Agricultural Technologies" topic, but these events do not appear when one chooses the business type "Agriculture" and then format "Events".	This could be a minor oversight, or it could mean a misunderstanding of the filtering logic of this database. Please fix if an oversight, please use more explanatory text if this is deliberate design. With the current layout, one assumes Agriculture would contain all content relating to Agriculture.	Done
19	Level 1 Browse/ Search Main Page	Table Design: See Global Issues				

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
20	Level 1 Browse/ Search Main Page	Font Size: See Global Issues				
21	pages:	Potentially confusing three-tier choice structure on top of page after a single Topic has been selected: sub-Topics, Business Type, and Format	1	Page presents user with three sections from which to choose: topic, business type, and/or format. Laid out linearly down the page, it suggests three steps of choices need to be made. But, no instructions are given.	Leaving such important search choices to color shading is not optimal. Consider adding short instructional phrases or changing the vertical (step-like) layout of the three sections.	Done, but we are considering further improvements to "instructions"
22	Level 2 Browse/ Search sub- pages: Topic X	Three sections of choices but only two sections of colors; user could draw faulty logic	2	Grouping of Business Type and Format in the same colored section (distinct from Topic section) might lead to users creating a faulty logic. Be careful in what you are trying to infer by grouping these two sections by color. They are distinct from sub- topics, but are they related in a way that they aren't related to Topics?	A line of instruction saying *why* these two sections are together yet distinct from the Topics links could clear up the problem Or, reconsider design of layout as you re-think the way content has been grouped on this type of page.	To be addressed in next redesign
23		Section(s) of active links are still available to click even after a "No results were found matching the specified criteria" message is returned.	2	The current page design allows users to continue searching in an empty set of content by still showing the section(s) a user hasn't yet "browsed" in. A user attempting to apply logic b this page could get the wrong idea of how the database works.	If the user's search returns no results, do not show the remaining section(s) of links. Consider providing, in addition to the explanatory message, a link to return "back" to the previous search level.	Done
24	Article Detail page	No notice when links open in new browser window and are on external sites, or when they are PDF format	3	There is not text explaining that links to articles will take the user to a different site and that the article will open in a different browser. Assume that some articles are PDF but not identified as such, as well.	A little text would prepare the user for the forthcoming action: always a good thing to do for the user.	PDF files are now identified. Further instructions to be addressed in next redesign

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
25	Article Detail page	Sub-grouping of current Format content	3	Currently the vague term "Format" holds a lot of varied content, which could cause navigation confusion. How would a user know Articles are under Format?	Could current Format content be divided into two groups, each group having a more accurate name? Orgs/websites/general info and then more specific articles/questions/events? Consider layout; perhaps two columns used in this section?	Addressed
26	Format: Question	Page Title needs improvement for layout and to optimize screen use.	3	Question detail pages do have page titles [as opposed to other pages on the site] but these page titles are exact repeats of the questions being asked.	title would be good because it	Done, but further improvements will be accomplished in next redesign
27	Format: Question	Use of ":" rather than "" in page titles	3	Most question pages have titles like the following: "ADVANCED METERING: What are smart" But, some have page titles that use dashes: "ALTERNATIVE HOME DESIGNPlease send me information about ea"	Minor editing point: be consistent with the use of colons in the page titles.	Addressed
28	Format: Report	Reports open in new browser window and are on external sites	3		A little text would prepare the user for the forthcoming action: always a good thing to do for the user.	To be addressed in next redesign
29	Format: Case	"Case" not quite descriptive enough and doesn't use commonly accepted phrase		Only when I clicked on Case did I realize this was for "Case Studies." Case Study is a fairly standard phrase that should be retained.	Since this was rated as important content in the previous usability study, consider lengthening name. Using "case" might make the link fit better in the columar layout, but it also decreases user comprehension and may inhibit user access to this content.	Done
30	Format: Software	external links not labeled	3			

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
31	Format: Standard	Meaning of term "standard" not immediately clear	2	The term standard, with no supporting context, is not clear, especially when grouped under a heading "Formats."	"Codes and Standards" was rated as important content in Study 1. Consider using this term again.	Done
	Format: Event	printer friendlygreat!				
32	Format: Newslink		m for News a	anized service that pools news and nd Events listings? The links seem		Done - removed from display\
33	Format: Program	to isolate this content as "Form about programs to apply and in section and at this level remain program and force it to be sear	at/Program". iquire about, l s problematic ched for in the iness type or	. What help is it to have ID'd it as a at way? I see more advantage to it topic. So this returns again to: is		
34	Search Results Page	Title of Page Takes up Space	2	Although other comments relate to the lack of a page title, in this instance, the page title is given too much weight and takes up valuable space in which search results could be shown.		To be addressed in next redesign
35	Search Results Page	Repetition of Results	1	A search on "Appliances" returned many identical search results. Following these identical links went to identical page in Topics section, with same amount of results in the Topics table.	How are Searches performed? If possible, construct Search so that duplicate results are not returned. Duplication, coupled with all pages being named the same, really reduces Search effectiveness.	Done
36	Search Results Page	Search Results all have same "EnergyIdeas.org" title	1	On first glance, it looks like the Search has returned the same page over and over again. This Search Results is not conducive to any time of skimming; instead, the format requires reading through every item and inferring its content	description included in the search results.	Done

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
37	Search Results Page	Unclear division of Search Results	1	There are "Search Results" listing results containing the inputted search criteria. Then, surprisingly, there is another section of results containing only documents. It's doubtful that users are expecting another section of results at the bottom of the search results page.	Explain what "Search Results" actually includes or excludes. Publicize existence of separate search resultsdocuments onlyon bottom of page. Or, have just one "Search Results" section and title the results better so Documents, articles, questions, etc., are identified easily.	Done
38	Search Results Page	"Documents" an unclear descriptive tile	3	"Documents" is not used elsewhere in the site. Formats have been broken down quite finely into articles, reports, questions, etc., but these terms aren't used in search results. What subset of Formats are documents?	If it is decided to keep dividing search results, consider using a term other than documents, or explain what qualifies as a document.	Done
39	Search Results Page	Confusing message when no "documents" are returned	3	articles? It's not clear] are returned, a "No items were found using the search criteria" error message is returned. This is a misleading	First, re-consider splitting up search results into document and non-document sections. Also, use a term other than "document" since there are no formats corresponding to "documents" on this site. If there are good reasons for it, though, re- write error message to say "No documents were found using that search criteria."	Done
40	Site Map	Placement of Site Map link	2	As mentioned in Global section, the sitem ap link is positioned such that it appears to be a descriptor of the Search box, and not an independent link itself.		Done
40b	Site Map	Site Index a more accurate term	3		Re-name the "site map" a "site index".	Decision not to change based on common practice

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
41	About Us	Length of main About Us page	2	page	Consider a change in IA for this section. Provide a shorter About Us page with links to some of the sections currently included all on the main page. When clicked, have the "About Us" link in the sidebar navigation expand to display the following links that would be more visible and easier to use than the current box of links at the bottom of the About Us pages: About the Alliance Ask An Expert Contact Us Disclaimer <energyideas.org administration=""> N/A on 12/8 Events Survey Legal Info <delete, link="" should<br="">appear only in footer&gt; Media Kit Staff Bios Tell Our Content Staff <consider making this a link from Contact Us page&gt; Tell Our Webmasters <consider making this a link from Contact Us page&gt; Visitor Feedback What's New Archives</consider </consider </delete,></energyideas.org>	To be addressed in 2003
42	About Us	Remove main page content to visible sub-link	3	Important sections, such as Contact Us, are on such a long page that to make them a link would actually make them more visible	Remove content from the main that should have its ownvisible section: Staff, Contact Us, Media Kit	To be addressed in 2003

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
43	About Us	Box of links does not remain consistent	2	The About Us link box does not include an inactivated link for the page currently being displayed. Instead, that link disappears.	If and when these links are moved to the sidebar, just inactivate the link of the displayed page. This ensures continuity and context for navigating through this section.	Done
44	About Us	Three identical forms for contacting EIC staff	2	There are 3 forms with which users can contact EIC staff. The differences between the forms are minute: users may not differentiate between Content questions, categorization questions, and webmaster questions.	If this organization can be done on the back end, that would give users one form b fill out, simplifying choices and the site.	
45	About Us	Breadcrumbs track every step within About Us	2	Contrary to breadcrumbing operation in the rest of the site, breadcrumbs in About Us seem to note every page navigated to within this section. This can make a very long breadcrumb trail	Can the About Us section be organized such that breacrumbs are Home > About Us> sub-section X>possible sub-section Y ?	Done
46	About Us: Ask An Expert	Accuracy of the page title	2	"Ask an Expert" title doesn't really mesh with the expressed purpose of the page, which is to pose questions about categorization changes. The other two contact forms seem to address very similar issues: "site problems" and "content issues". Users may notbe able to differentiate these like staff members can.	If site maintenance requires three separate forms, re-name this to be consistent with the other two forms. However, strongly encourage to combine this form with content & webmaster contact forms.	Done
47	About Us: Events Survey	Content seems to clutter up About Us section focus.	3	This survey seems better suited to being in the Events section than being a link under About Us.	Keep About Us for content that's truly about EIC and NW Alliance. Move Events Survey to live under Events.	Done - removed
48	About Us: Legal Info	Content seems to clutter up About Us section focus.	3	This seems to be basic legal info about use of Energyldeas.org. This content is usually left to a footer link	Unless some type of policy prevents it, just put this link in the footer and keep it out of About Us section for simplification.	Done

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
49	About Us: WebSite Feedback	Content seems to clutter up About Us section focus.	3	More visitors to the site might fill this out if it was globally available; say on the footer	Add this link to the footer. By reducing form links to just one, this could be added without changing size of footer.	Done
50	About Us: Visitor Feedback	Length of feedback form	3	This is a very long form	Is every single input box necessary? Shorter surveys increase amount of feedback. To start, are both the last two text entry boxes needed? 1)Do you have any additional suggestions for overall improvement? 2)Do you have anything else you"d like to tell us about the web site?	Done-removed
51	Ask an Expert	See About Us: Ask an Expert				
52	About Us: Disclaimer	Disclaimer page has error on it	3	The About Us navigation box doesn't appear; that seems to be the source of the error message	Probably an easy fix.	Done
53	About us: El.org Admini- stration	Administration page has error on it	3	No content is appearing, only a URL	Probably an easy fix.	Done
54	Today's Q& A	Display of the questions	3	There's no padding/right margin so question is a bit hard to read.	For better readability, provide a larger right margin so question doesn't appear to be cut off by edge of browser window.	Done
55	Today's Q& A	Display of the answer	2	A link to the answer, and a healthy waiting time, gets you the answer to the question. Is this link really necessary? Can't the answer be displayed on the same page? Or does EIC truly want the quiz-type format of not providing answers?	Provide the answer immediately unless the quiz format is wanted. Displaying the answer avoids the wait while answer loads.	Done

ID	Section	Issue	Severity	Explanation	Recommendations	Addressed? (11/20/03 L.Witham)
56		Section seems to be organized under Regional News		While on the sidebar Today's Q&A seems to be a level below the home page, once on the Q&A page it appears that it's part of Regional news, as that section's navigation box is on the bottom of the page.	News and have it stand independently in site architecture. It' relationship to Regional news	Done
		Internal page links should be moved to sidebar navigation		expand to show sub-links under	Add sub-links under Regional News and take them out of the main Regional News content pages	Addressed

# Appendix H. Examples of Tracking Tables and Charts

		Cases		Clients			
Year	Total	Total         Percent           Northwest         Northwest		Total	Total Northwest	Percent Northwest	
1990							
1991							
Etc.							
Total							

**Example 1** Number of EIC Inquiries and Clients

**Example 1 Notes**: One goal of the EIC, of course, is to increase the number of cases and clients over time, and Example 1 will allow the EIC to track changes annually. In addition, with the focus still being on the Northwest, it is important to break out the percentage of cases and clients from the Northwest. The EIC should also flag any "special projects" that may influence the volume of cases or clients on a particular year.

Example 2 Percentage of First Time EIC Clients

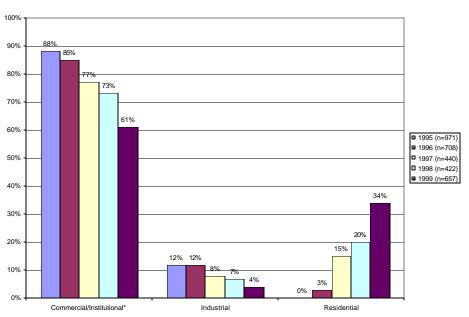
Year	Total Clients	Repeat Clients	First Time Clients	First Time Clients (%)
1990				
1991				
Etc.				

**Example 2 Notes:** In growing the client base the EIC must expand the base of energy professionals that use the EIC services. In an effort to track the success of these efforts, the EIC should track the percentage of repeat vs. first time clients as in Example 2.

	Year 1	Year 2	Year 3	Year 4 etc.
Company Type				
Utility				
Government (State/National)				
Engineer/Architect/Consulting				
Etc.				
Total	100%	100%	100%	100%

Example 3 Type of Company Using Hotline Services

**Example 3 Notes**: As the EIC identifies and clarifies its target market segments it is crucial to track use of the EIC services by these segments. Increases in the use of the EIC by these segments is an important way to measure the effectiveness of targeted marketing.



Example 4 Business Sector of Hotline Request

**Example 4 Notes:** In an effort to track not only the type of callers but the type of information requested by callers, the EIC should also track the market sector of the inquiry. As shown in Example 4, the EIC can track the sector of the request by using a simple bar chart. This chart can reveal trends, such as an increase in requests for one sector vs. another (e.g., increasing requests about the residential sector, as shown in the example). Substantial changes may be caused by changes in the type of clients. For example, an increase in "individual" callers in Example 3 (those not associated with a company) and

an increase in residential inquiries may mean that individual home owners are calling to discuss their residential energy consumption. This may lead the EIC to alter marketing strategies to focus more closely on specific target markets.

Program	Year 1		Year 2		Year 3 etc.	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Energy Ideas Clearinghouse						
Lighting						
HVAC/Water						
Etc.						
Total						

Example 5 General Topic of Hotline Inquiry

**Example 5 Notes**: In an effort to provide the most comprehensive information possible the EIC needs to track not only the business segment of the hotline request, but also the topic of the inquiry, as shown in Example 5. By identifying the types of information clients most need this table is quite valuable in determining where EIC should focus it's energy information resources. In other words, if clients have many questions about lighting and HVAC, the EIC can expand it's fact sheets and informational resources for these end uses.

**Example 6** Mode of Informational Delivery

Method of	Yea	ar 1	Year 2, etc.		
Reply	Frequency	Percent	Frequency	Percent	
Postal Mail					
Fax					
Email					
Telephone					
Total					

**Example 6 Notes**: The preferred method of informational delivery can shift over time, and the EIC can track these changes as in Example 6. The EIC should also attempt to move to the most-cost effective methods of informational delivery, which will likely be electronic methods such as email.

Source	Yea	ar 1	Year 2 etc.		
Source	Frequency	Percent	Frequency	Percent	
Utility					
Media					
Repeat User					
Etc.					
Total					

Example 7 Source of EIC Referral

**Example 7 Notes**: In an effort to track the efficacy of various marketing efforts the EIC should track the source of the EIC referral, as in Example 7. Changes over time may reflect changes in the EIC marketing strategy (e.g., a higher percentage of utility referrals might indicate a successful campaign to educate utilities about the EIC services). In addition, the EIC should provide more detailed breakdowns for some of these categories (e.g., media is quite general).

Example 8 Type of Company Using Hotline Services by General Topic of Hotline Inquiry

Program	Utility		Government (state/national)		Engineer/Architect/ Consulting, etc.	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Energy Ideas Clearinghouse						
Lighting						
HVAC/Water						
Etc.						
Total						

**Example 8 Notes**: Additional cross-tabulations of type of company (for at least the top 5-10 types) by other possible dependent variables, including sector of request, general topic of inquiry, and mode of informational delivery would also be important to look at trends by business segment. As shown in Example 8, this would allow EIC to track informational needs by each of these different client segments, an important component of determining not only usage characteristics, but informational needs for the future.

### **Web Site Statistics**

			es site esuge sj	- •••-	
Year	User Sessions	Unique Clients	Average User Sessions/Client	Average Time Spent per Visit	Percent Accessing past Home Page
1998					
1999					
2000					
2001					
Total					

Example 9 EIC Web Site Usage by Year

**Example 9 Notes**: Tracking annual Web site usage provides an important examination of trends over time that may be evident in monthly charts or reports. Each of these columns also provides important data regarding usage, including measurements regarding the number of clients, the number of times clients return to the page, the time they typically spend on the site, and the percent that go beyond the home page to search for information.

### **Listserve Statistics**

Listserv	Year 1	Year 2	Percent Change
Energy Newsbriefs			
Alliance1			
Alliance2			
Etc.			

Example 10 Number of Listserv Subscribers

**Example 10 Notes**: The listservs perform an important purpose for the EIC as a tool for disseminating energy efficiency information, connecting the energy efficiency community, and promoting the EIC services. Tables of annual subscribers allow for the presentation of annual trends.