

Clallam County PUD Commercial Customer

Baseline Profile and Satisfaction Survey Research December 2009



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Research Goal & Objectives

Goal

The purpose of this research is to determine current levels of commercial customer satisfaction with the services provided by the Clallam County PUD and develop baseline information useful in understanding their commercial customers.

Objectives

The following objectives were addressed by the research

- Established baseline profiles to better understand commercial customers
- Categorized how often, reasons for contacting and point of contact reached at the PUD
- Measured customer satisfaction resulting from contact with the PUD related to ease in contact, courtesy, and willingness and ability to help resolve issues, responsiveness to requests, and technical expertise.
- Evaluated customer perceptions of PUD performance with overall satisfaction, prices/rates, service reliability, power outages, power restoration speed, conservation programs, environmental stewardship, and bill accuracy and clarity.
- Conducted multivariate analysis by primary business location (service area), business sector, size, and number of locations. Correlation and discriminant analysis were performed to assess associations between demographics and factors surveyed.
- Examined customer awareness and participation in PUD energy efficiency and conservation improvements and incentive programs, as well as barriers and willingness to participate in programs.
- Examined customer willingness to pay increased rates for using renewable energy
- Ascertained customer plans to invest in energy efficiency improvements and facility expansion during 2010.
- Examined customer interest in attending potential PUD sponsored energy efficiency and conservation education training sessions and determined topic areas of greatest interest.
- Determined where customers learn about energy saving products and services and how they prefer to be contacted.

Research Design & Methodology

Sample Size & Margin of Error

Clallam County PUD supplied a list of current Commercial customers to Hebert Research under confidentiality agreement. The table below defines the customer group sample size studied.

Commercial Sample Size		
Sample size (n)	Quota Goal	150
	Completed	150
Max. Margin of Error (95% Confidence Level) ±		7.5%*

* In measuring a response which reflects typical respondents for a given area, accuracy is dependent on the population size of the area being surveyed and the number of survey responses collected. The relative accuracy level is reported as the “margin of error”, which represents the interval between which the actual answer may be higher or lower from that reported. For Clallam County PUD’s combined service area, with a 150 participant sample size, the maximum margin of error at the 95% confidence level, is 7.5%. During certain sections of this survey, follow up questions asked with reduced numbers of participants, resulted in higher margins of error. Throughout this report, any increased margins of error are listed in the table footnotes.

Sample Distribution & Data Weighting

Sampling for the telephone survey was divided between the four different service area regions where the PUD provides services to obtain sufficient sample size for the effective analysis of each segment. Data was then weighted to reflect the commercial customer distribution across each service area. The table below shows the regional distribution surveyed as well as the weighted distribution as used in the results reported.

Primary Business Location (Service Area, Data Weighting & Survey Sample Collected)		
Primary Business Location (Service Area)	Actual Distribution (Final Data Weighting) (%)	Sample Distribution Used for Survey (%)
Sequim	58	45
Port Angeles	18	22
Forks	18	20
Clallam Bay / Sekiu / Neah Bay	6	13

Questionnaire

Hebert Research and Clallam County PUD teamed together to develop an effective survey questionnaire, to collect the range of information needed. The final questionnaire consisted of 51 questions, with 3 open-ended questions.

Survey Process

The survey was conducted between December 11th 2009 and December 19th 2009. A total of 150 survey interviews with current Clallam County PUD commercial customers were completed. The response rate was 66%, which represents the proportion of individuals who agreed to participate in the research. Tests were conducted to determine non-response error.

Hebert Research administered the survey by telephone with highly experienced in-house research assistants, who have collectively spent decades performing interviews. Call efficiency was aided electronically through a Computer-Assisted Telephone Interviewing (CATI) system, which randomly selects participants from the call list and prompts the questions asked. The system provides for real time data capture during the interview. Tests determined that no significant non-response error occurred. If potential participants were unable to complete the survey during initial contact, up to five total attempts were made, calling on different days and at different times during business work hours.

Analysis of Variables

Univariates. Response data for single variable questions (univariates) were analyzed using industry accepted measures of central tendency (means).

Multivariates. Pairs of variables (multivariates) were also analyzed to determine if interactions existed between different variables. Multivariate analysis consisted of Analysis of Variance (ANOVA), Chi Square, and Correlation Analysis. The response to binomial (*e.g.*, yes/no questions), numerical rating, and multiple choice questions were analyzed by business profile demographic characteristics, such as geographic area location for primary business, business sector, number of employees, and number of business locations.

Interpretations and inferences presented based on the analysis results are intended to provide an independent statistical perspective. The statistical procedures utilized were applied at always the 95% confidence level ($p \leq 0.05$ significance level) to estimate values or determine significance. Multivariate analysis was performed to detect any demographic trends present for all question variables studies. Statistical significance is reported at the end of each section below measured by *p*-value. If $p \leq 0.05$, the statistical test is significant and thus reported here. If $p \geq 0.05$, the statistical test is not significant, and therefore is not significant and typically not reported.

Hebert Research has made every effort to produce the highest quality research product that we can within the agreed specifications, budget and schedule. We used statistical techniques which, in our opinion, are the most accurate possible. However, inherent in any statistical process is the possibility of error, which must be considered in evaluating the results. Statistical research can predict consumer reaction and market conditions existing only at the time of sampling, within the parameters of the project, and within the margin of error inherent in the techniques used. Evaluations and interpretations of statistical research findings, and decisions based on them, are solely the responsibility of the customer. The conclusions, summaries and interpretations provided by Hebert Research are based strictly on the analysis of the data gathered and are not to be construed as recommendations. Therefore, Hebert Research neither warrants their viability nor assumes responsibility for the success or failure of any actions subsequently under taken by the customer in using the results.

Commercial Customer Profile

Basic Demographic Distributions

The table below summarizes the commercial industry sectors represented by the respondents. Commercial Retail & Commercial Office were the largest sectors documented, together totaling 29% of the respondents.

Commercial Sector Distribution	
Sector	%
Commercial Retail	19
Commercial Office	10
Commercial Hospitals	7
Other Construction	6
Commercial Hotels	6
Commercial Eating/Drinking	5
Other Agriculture, Forest, Mining	4
Commercial Warehouse	3
Industrial Lumber	2
Industrial Metals	1
Industrial Other	1
Commercial Grocery	1
Manufacturing	1
Industrial Stone, Clay, Glass	1
Industrial Transportation	1
Industrial Paper	1
“Other”	28
Don't Know / Refused	1

The margin of error for this variable is 7.5% (at 95% confidence level).

The “Other” industry segment included the categories as specified by the respondents:

- Public Service
- Road
- Water system
- Electrical Contractor
- Small construction & repair
- Construction sand & gravel
- Heavy road build etc clearing
- Log homes
- Forestry
- Evergreens bought for florists
- Wine manufacture & sales

- Dairy Farm
- Highway
- Marine
- Consulting

The Sequim service area has the is the highest percent of primary business locations for commercial customer (58%). And Clallam Bay / Sekiu / Neah Bay had the smallest number with 6%. Forks and Port Angeles have similar distributions of 18% each.

Primary Business Location	
Service Area	%
Sequim	58
Port Angeles	18
Forks	18
Clallam Bay / Sekiu / Neah Bay	6

The margin of error for this variable is 7.5% (at 95% confidence level).

Nearly half (46%) of the businesses surveyed had less than five employees, 26% had five to nine employees, 28% had ten or more, and only 6% had 30 or more in Clallam and Jefferson Counties.

Number of Employees in Business	
Number	%
1 to 4	46
5 to 9	26
10 to 19	14
20 to 29	8
30 or more	6

The margin of error for this variable is 7.5% (at 95% confidence level).

Well over half (68%) of the businesses only have only a single location in Clallam and Jefferson Counties. And only 8% had four or more locations.

Number of Business Locations	
Number	%
1	68
2	17
3	6
4 or more	8

The margin of error for this variable is 7.5% (at 95% confidence level).

Demographic Variations by Primary Business Location

The majority of the trends in the entire data set were not significantly different. The Sequim service area, has the highest number of primary business locations, and also typically the highest percent of business within each employee number range or number of locations. The exception was Forks which had a similar number of businesses as Sequim having 30+ employees.

Number of Employees –BY– Primary Business Location ($p = 0.24^*$)				
Employees (Number)	Primary Business Location (Service Area)			
	Sequim (%)	Port Angeles (%)	Forks (%)	Clallam Bay / Sekiu / Neah Bay (%)
1-4	64.7	14.7	14.7	5.9
5-9	56.8	24.3	16.2	2.7
10-19	40.9	27.3	22.7	9.1
20-29	50.0	20.0	30.0	0.0
30+	40.0	0.0	40.0	20.0

Results are standardized to 100% across service areas (rows).

* The bulk of the trends are not significantly different -- i.e., they are different only at the 76% confidence level.

Number of Business Locations –BY– Primary Business Location ($p = 0.62^*$)				
Locations (Number)	Primary Business Location (Service Area)			
	Sequim (%)	Port Angeles (%)	Forks (%)	Clallam Bay / Sekiu / Neah Bay (%)
1	48.1	18.2	26.0	7.8
2	65.0	10.0	20.0	5.0
3 +	66.7	11.1	11.1	11.1

Results are standardized to 100% across service areas (rows).

* The bulk of the trends are not significantly different -- i.e., they are different only at the 38% confidence level.

Major Facility & Equipment Investment Plans

The majority (81.1%) of businesses surveyed do not anticipate major facility changes or equipment investment at this time. Approximately 10% of businesses plan facility additions over the next year, 9.4% plan equipment upgrades, 4.3% plan major renovations, and 5.1% do not know if their organization will make major facility or equipment investments or not.

Major Changes or Improvements Planned	
Type	%
None	81.1
Facility additions	9.7
Equipment upgrades	9.4
Major renovations	4.3
Don't know	5.1

The margin of error for this variable is 7.5% (at 95% confidence level).

The Sequim service area based businesses reported the highest number of businesses anticipating no major facility or equipment investments (62.6%; thus 37.4% may potentially invest). Sequim based businesses reported the highest percentage among those planning facility additions (66.7%). Forks based businesses reported the highest number among those planning major renovations (50%). And Sequim and Forks based businesses reported the highest percentage among those planning equipment upgrades.

Major Facility and Equipment Investments Planned –BY– Primary Business Location				
<i>(p = 0.038*)</i>				
Investments Planned (Response)	Primary Business Location (Service Area)			
	Sequim (%)	Port Angeles (%)	Forks (%)	Clallam Bay / Sekiu / Neah Bay (%)
Equipment upgrades	35.7	7.1	35.7	21.4
Major renovations	25.0	0.0	50.0	25.0
Facility additions	66.7	22.2	11.1	0.0
None	62.6	17.4	15.7	4.3

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at the 96% confidence level.*

Contact with PUD

Contact During Last Year

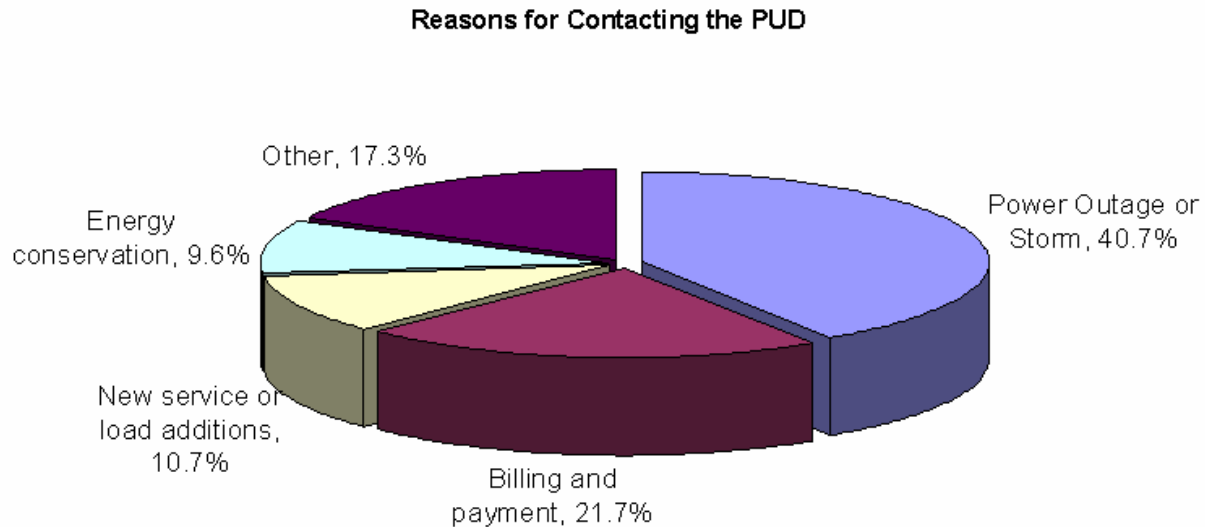
Number of Times Contacted. Well over half of business customers surveyed (64.3%) stated that they had not contacted the PUD during the last year. About a quarter (25.7%) of all business customers surveyed contacted the PUD 1 to 3 times. And nearly ten percent (9.9%) of respondents contacted the PUD 4 or more times. The average number of contacts among all respondents was 1.61.

Number of Times Contacted	
Number *	%
0	64.3
1	13.1
2	9.6
3	3.0
4	3.0
5 or more	6.9
<i>* Mean</i>	<i>1.61</i>
<i>Std. Dev.</i>	<i>5.78</i>

The margin of error for this variable is 7.5% (at 95% confidence level).

Most Recent Contact

Reason for Contact. The major reason for most recent contact with the PUD was for power outages & storms (40.7% total). With billing and payment questions was the next most frequently (21.7%) reported category. New service and load additions as well as energy conservation accounted for about 10% each of the calls.



The margin of error for this variable is 13.5% (at 95% confidence level).

The “Other” reasons stated for the contact (17.3%) included the following:

- *Requested a print out*
- *Bought a washer and dryer with a rebate*
- *Clarify for schedule outages*
- *Meter Reader came out to our office because he was required to sign a waiver paper acknowledging the industrial hazard of coming into our location by him.*
- *They contacted us regarding a power outage.*
- *Meter Problems*
- *Locating and looking at dangerous trees*
- *Pool removal*
- *They left me a message saying I had a main water problem.*
- *Burnt out service, starter equipment for a motor shorted out and was ruined.*
- *Broken water pipe*

Contact Reached. During their most recent contact with the PUD the primary contact was with a customer service representative (67.6%), followed by technician/engineer (7.9%), energy conservation advisor (5.8%), or field personnel (3.3%). Only 8.9% of participants dealt primarily with the PUD’s voice message unit (VMU).

Contact Reached	
Contact	%
Customer service	67.6
Got the voice message unit (VMU)	8.9
Technician / engineer	7.9
Energy conservation advisor	5.8
Field personnel	3.3
Other	6.5

The margin of error for this variable is 13.5% (at 95% confidence level).

Time Period for Most Recent Contact. The great majority (83.5%) of respondents who contacted the PUD by telephone called during business hours.

Time Period When Called	
Time	%
During Business Hours	83.5
Outside Business Hours	16.5

The margin of error for this variable is 13.5% (at 95% confidence level).

Among those respondents who experienced the VMU (only 5 participants) the majority (4) reported the VMU’s messaging information as being helpful and/or sufficient.

Was information on voice message unit (VMU) helpful / sufficient?		
Response	Number of Respondents	%
Yes	4 *	82.6
No	1 *	17.4

** Results based on only 5 respondents and a margin of error of 43.7% (at 95% confidence level).*

Satisfaction with Most Recent Contact

Business customers who contacted the PUD during the last year were asked to rate their satisfaction with the courtesy and willingness during their latest contact with the customer service representative. The average rating was high at 8.99 on a 0 to 10 scale.

Service Factor Satisfaction Rating During Most Recent Contact		
Service Factor	Mean Rating	Std. Dev.
Courtesy and willingness of the customer service representative *	8.99	1.74
PUD's ability to restore power in a timely fashion **	7.86	2.37

* Satisfaction rating with courtesy of customer service has a 13.5% margin of error (at 95% confidence level).

** Satisfaction rating with PUD's ability to restore power has a 15.4% margin of error (at 95% confidence level).

Nearly sixty percent (59.4%) of respondents reported a perfect rating of 10, with 92% of those respondents reporting high ratings of 7 to 10. Less than 10% reported moderate to low ratings of 6 or below.

The PUD is interested in customer impressions of the PUD's ability to restore power in a timely fashion after outages. The survey was well positioned to measure this because the survey was taken shortly after a series of power outages had occurred, some with delayed power restoration. This situation should pre-dispose the respondents towards lower than average ratings.

Respondents who called regarding a power outage reported an average score of 7.86 out of 10. Nearly three quarters of them (74.1%) reported high ratings of 7 to 10. This high relative score suggests that on average their impression was that the PUD restored power in a timely fashion. Moderate ratings of 4 to 6 were expressed by 20.3% of the respondents. And low ratings, of 0 to 3, were reported by only 5.6% of the respondents.

Perception & Satisfaction with PUD Services

By Service Factor

Commercial customers were surveyed for their general satisfaction with a series of twelve PUD service factors. All factors received very high ratings above 8.0, on a 0 to 10 scale. The average overall satisfaction was 8.99.

Because all of the scores were high and thus with marginal spread, only extreme differences in rankings may be significantly different. Respondents reported the highest average satisfaction rating with the PUD providing accurate, understandable & timely billing (9.24).

Having reasonable prices/rates (8.03), providing helpful information about rates (8.79), and being responsiveness to requests (8.82) were the only categories with scores lower than average (8.99). Having reasonable prices/rates appeared to be the only category significantly different from the overall satisfaction rating, which was at a level of $p \leq 0.05$ (~95% significance level).

Although the PUD may not be able to improve rates, changing perception may be possible. To improve the “reasonable” perception rating, the PUD could for instance work to give customers a better understanding of factors causing their rates or how the PUD’s rates compare to those in other regions, to help establish the perception that Clallam is not higher than average.

Service Factor Satisfaction		
Service Factor	Mean Rating	Std. Dev.
Providing accurate, understandable & timely billing	9.24	1.12
Power quality	9.20	1.17
Environmentally responsible	9.16	1.15
Provided reliable power in the past 12 months	9.11	1.42
Restored power as quickly as possible during the past 12 months	9.03	1.54
Energy efficiency programs	9.02	1.18
Easy to contact	9.01	1.33
Technical knowledge/expertise	9.00	1.24
Overall satisfaction with Clallam PUD power service	8.99	1.40
Responsiveness to your requests	8.82	1.74
Provides helpful information about rates.	8.79	1.55
Reasonable prices/rates	8.03	1.81

The margin of error for this variable is 7.5% (at 95% confidence level).

By Primary Business Location (Service Area)

Multivariate analysis showed that although primary business locations in all service areas gave high ratings, marginally higher ratings were reported in the Sequim service area for overall satisfaction with power service, providing reliable power over the last year, and restoring power as quickly as possible over the last year. (Sequim was also the service area reporting the least number of power outages). Compared to other service areas Clallam Bay / Seiku / Neah Bay reported marginally lower satisfaction levels in all categories.

Primary Business Location –BY– Service Factor Satisfaction			
Primary Business Location (Service Area)	Service Factor Satisfaction (Mean Rating)		
	Overall Satisfaction with Power Service (<i>p</i> = 0.018*)	Provided Reliable Power Over Last Year (<i>p</i> = 0.009*)	Restored Power as Quickly as Possible Over Last Year (<i>p</i> = 0.022*)
Sequim	9.42	9.42	9.36
Forks	9.17	9.11	8.81
Port Angeles	9.13	8.43	9.11
Clallam Bay / Seiku / Neah Bay	8.81	8.16	8.13

The margin of error for this variable is 7.5% (at 95% confidence level).

** Trend for increase service satisfaction with service area significant at > 97% confidence level.*

By Number of Employees

Satisfaction ratings were high for across all business sizes rated by number of employees. Multivariate analysis showed that the satisfaction ratings and the business size were correlated in several categories. Ratings for power quality, environmentally responsible, energy efficiency programs, and technical knowledge were highest in businesses with 1 to 4 employees, and marginally decrease with size, being lowest in groups with 20 or more employees in Clallam and Jefferson Counties.

Number of Employees –BY– Service Factor Satisfaction				
Employee (Number)	Service Factor Satisfaction (Mean Rating)			
	Power Quality (<i>p</i> = 0.045*)	Environmentally Responsible (<i>p</i> = 0.026*)	Energy Efficiency Programs (<i>p</i> = 0.007*)	Technical Knowledge / Expertise (<i>p</i> = 0.020*)
1 - 4	9.43	9.42	9.42	9.36
5 - 9	9.28	9.17	9.11	8.81
10 - 19	8.98	9.13	8.43	9.11
20 - 29	8.58	8.81	8.16	8.13
30+	8.46	8.00	8.33	8.33

The margin of error for this variable is 7.5% (at 95% confidence level).

** Trend for decreasing satisfaction with increasing organization size significant at >95% confidence level.*

By Number of Locations

Satisfaction ratings were high whether the businesses had single or multiple locations in Clallam and Jefferson Counties. Multivariate analysis showed that the ratings for high power quality, energy efficiency programs, provides helpful information about rates, and technical knowledge trended higher with fewer locations and were marginally lower for businesses with 3 or more locations.

Number of Locations –BY– Service Factor Satisfaction				
Locations (Number)	Service Factor Satisfaction (Mean Rating)			
	Power Quality (<i>p</i> = 0.019*)	Environmentally Responsible (<i>p</i> = 0.038*)	Energy Efficiency Programs (<i>p</i> = 0.048*)	Technical Knowledge / Expertise (<i>p</i> = 0.007*)
1	9.31	9.18	8.93	9.17
2	9.29	9.08	9.14	9.06
3 or more	8.48	8.24	8.06	8.07

The margin of error for this variable is 7.5% (at 95% confidence level).

** Trend for decreasing satisfaction with increasing organization size significant at 95% confidence level or greater.*

Effect of Power Outages on Perception & Satisfaction

Number of Outages Experienced During Last Year

The commercial customers were asked to recall the total number of power outages that they experienced at their location during the last year, where power went out more than 5 consecutive minutes. The average number of power outages was 2.23. Nearly a third (29.5%) of respondents did not recall any power outages. Roughly half (48.4%) of the respondents reported 1 to 3 power outages. Less than one fifth (18.3%) of respondents reported 4 or more power outages. Just under 2% of respondents stated that they had 10 or more outages.

Number of Power Outages Experienced During Last Year	
Number *	%
0	29.5
1	20.6
2	17.1
3	10.7
4	6.4
5	4.9
6	3.3
8	1.9
10 or more	1.8
*Mean	2.23
Std. Dev.	4.23

The margin of error for this variable is 7.5% (at 95% confidence level).

Multivariate analysis showed that primary business customers in the Sequim service area reported the least average power outages (1.34) and Forks customers reported the most (3.86).

Experience During Last Year –BY– Primary Business Location				
Experience Type	Primary Business Location (Service Area) (Mean Rating) ($p = 0.023^*$)			
	Sequim	Forks	Port Angeles	Clallam Bay / Seiku / Neah Bay
Number of power outages	1.34	3.86	3.03	3.42

The margin of error for this variable is 7.5% (at 95% confidence level).

** Differences between service areas significant at > 97% confidence level.*

Effects on Perception & Satisfaction

Multivariate analysis detected a marked demographic exception for satisfaction with PUD power services during the last year. The highest overall satisfaction rating was reported for businesses reporting no outages. But with two or more power outages, the high satisfaction ratings (over 9) decreased to become only moderate satisfaction levels (values between 7 and 5) for “ability to provide reliable power” and “restores power quickly” during the last year. Thus, the threshold for satisfaction beginning to decrease appears to be reached after 2 or 3 power outages are experienced.

Effect of Number of Power Outages During Last Year Experienced on Service Factor Satisfaction			General Overall Satisfaction with Power Service ($p = 0.281^{**}$)
Power Outages Experienced (Number)	Service Factor (Mean Rating)		
	Provided Reliable Power ($p < 0.001^*$)	Restored Power as Quickly as Possible ($p = 0.009^*$)	
0	9.67	9.45	9.34
1	9.23	9.54	8.99
2	8.91	8.82	8.85
3	9.31	8.81	8.74
4	8.15	9.04	9.24
5	8.06	8.27	7.88
6	7.43	8.17	8.53
8	7.01	5.86	8.50

The margin of error for this variable is 7.5% (at 95% confidence level).

** Trend for decreasing satisfaction with increasing power outages significant at 99% confidence level or greater.*

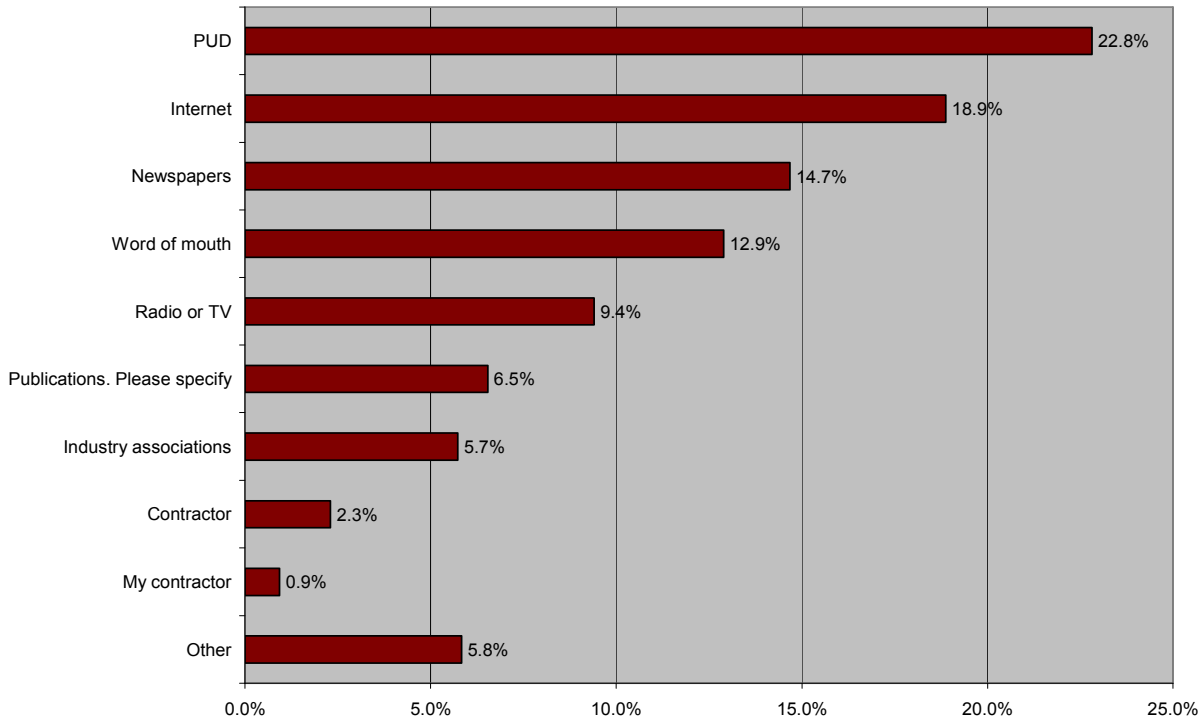
*** Differences in overall satisfaction with increasing power outages are not significant.*

Despite the significant negative satisfaction trends detected for power reliability and restoration speed, there was no clear trend nor significant differences detected for overall satisfaction with increased outages. It would take a larger sample size to establish whether or not a significant trend is indeed present. However, our current data suggests that if the trend is present, it will not be as large as those detected here for reliability and restoration speed.

How Customers Learn about Energy-Related Products & Services

The survey showed that the most common sources used to find information about energy-related products and services was from the PUD (22.8%), followed by internet (18.9%), newspapers (14.7%), word of mouth (12.9%), and radio TV (9.4%). Other categories tested scored under 7% each.

Where do you learn about energy-related products and services?



The margin of error for this variable is 7.5% (at 95% confidence level).

Among respondents who learn about energy-related products and services from newspapers these customers most commonly read Peninsula Daily News (96%; one third of respondents called the paper the “Port Angeles Daily”), Sequim Gazette (18%), or Seattle Times (11%).

Perception Why PUD Promotes Energy Efficiency & Conservation

Commercial customers were asked to state why they believe that PUD offers conservation programs and pays incentives to participate in such programs. The most common perceptions included “it is the right thing to do” (48.1%) and “to save customers money” (46.9%), which were each selected by nearly half of respondents. “To save PUD money” (37.3%) followed by the “PUD is required to” (33.4%) were less commonly selected.

Why do you think the PUD offers conservation programs and pays incentives to participate?	
Response	%
They believe it's the right thing to do	48.1
Saves customers money	46.9
Saves PUD money	37.3
PUD is required to	33.4
“Other”	15.9

The margin of error for this variable is 9.9% (at 95% confidence level).

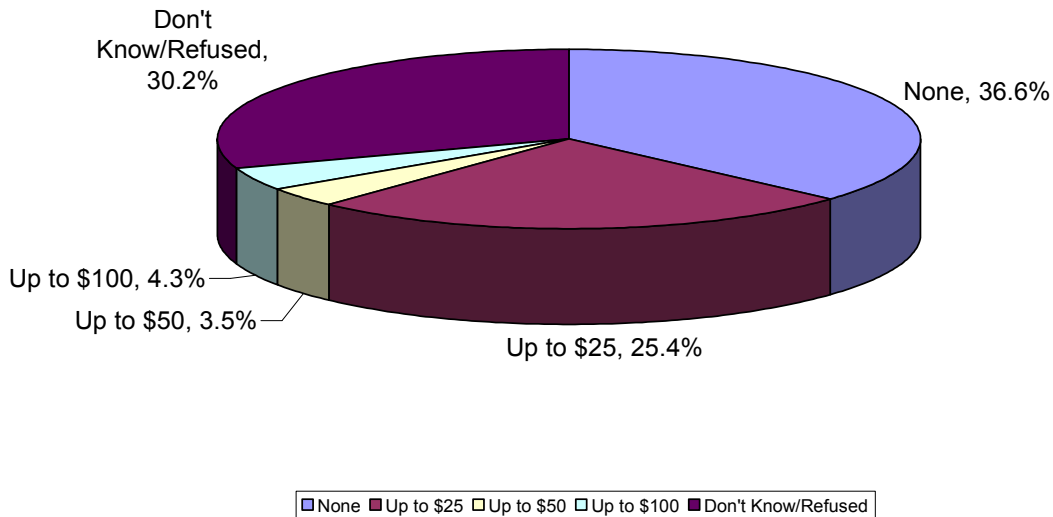
Those respondents selecting “Other” reasons (15.9%) offered the following explanations:

- *Saving energy*
- *We need to conserve energy.*
- *We can save more than we can create for new energy sources. This is a big factor in what they should operate on daily.*
- *Usually there are strings attached that they are going to make up somewhere along the line.*
- *To offset growth with energy. You don't have to build more dams.*
- *To keep energy costs low and keep everybody informed and keep their business. If you keep your customers happy you are benefiting yourself.*
- *To conserve*
- *They would be required to. The government has promoted it.*
- *Save energy*
- *Save a little power and it saves us all something.*
- *PR*
- *Overall, it's to cut down on the usage of power. If you're in a growth area, you won't have to purchase as much.*
- *In order to save power.*
- *Helps save energy.*
- *Everybody has been asked to do that and they are a part of it.*
- *Community responsibility to conserve energy.*

Customer Willingness to Pay for Renewable Energy Sources

Approximately 25% of commercial customers stated that they were willing to pay an extra \$25 in their monthly bills for utilizing new renewable energy sources. Only about 8% were willing to pay more than \$25. More than one third of respondents (36.6%) were not willing to accept any rate increase for utilizing new renewable energy sources, and 30.2% did not offer an answer.

How much of an increase in your monthly bill, if any, would you be willing to pay for the costs of new renewable energy sources?



The margin of error for this variable is 7.5% (at 95% confidence level).

Multivariate analysis showed that businesses with two or more locations were more willing to accept rate increases for renewable energy use than were single location businesses. Until businesses had 3 or more locations, little willingness (< 6%) was noted to pay more than \$25.

Rate Increase for Renewable Energy –BY– Number of Locations ($p < 0.010^*$)			
Response for “Acceptable Rate Increase”	Number of Locations		
	1 (%)	2 (%)	3 + (%)
None	41.0	21.1	22.2
Up to \$25 increase	12.8	36.8	38.9
\$26 or higher increase	1.3	5.3	22.2

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at > 99% confidence level.*

Efficiency & Conservations Actions Taken During Last Five Years

Survey respondents were asked to name the energy efficiency actions taken in the past five years. Most commonly (20.1%) they have installed energy efficient lighting, 12.8% turned down the water heater, 12.1% installed a programmable thermostat, and 11.3% purchased energy star office equipment. Less than 10% in each category have purchased energy star kitchen or lunchroom appliances, installed new windows, added insulation, or installed low-flow faucet aerators.

Energy Efficiency & Conservation Actions Taken During Last 5 Years	
Action Taken	%
Installed energy efficient lighting	20.1
Turned down the water heater	12.8
Installed a programmable thermostat	12.1
Purchased ENERGY STAR office equipment such as computers	11.3
Purchased ENERGY STAR kitchen or lunchroom appliances	8.8
Installed new windows	8.0
Added insulation to walls, floors or ceilings	7.7
Installed low-flow faucet aerators	6.6
Other	4.0
None	8.7

The margin of error for this variable is 7.5% (at 95% confidence level).

The survey queried the current energy conservation actions taken by PUD commercial customers. The majority of respondents have taken some form of energy efficiency action. Turning off lights in unused rooms or spaces, turning down the heat when leaving, and turning off office equipment or appliances when not in use were the most common conservation measures undertaken, with 75.9%, 68.0% and 62.1%, respectively of customers always taking action, and only 1.8%, 9.6%, and 8.9%, respectively never taking action. Turning off computers and unplugging appliance, device chargers or power strips when not in use were less common actions, with 50.9% and 25.2%, respectively of businesses always taking action and 16.7% and 46.4%, respectively never taking action.

Frequency of Energy Conservation Actions Currently Taken					
Action Taken	Frequency (%)				
	Always	Usually	Sometimes	Never	Don't Know
Turn off lights unused rooms/spaces	75.9	10.1	5.2	1.8	7.1
Turn down the heat when leave office	68.0	8.4	6.1	9.6	8.0
Turn off office equipment or appliances when not in use	62.1	11.0	10.7	8.9	7.3
Turn off computers when not in use	50.9	8.1	13.4	16.7	10.9
Unplug appliances, device chargers or power strips when not in use	25.2	3.7	15.7	46.4	9.0

The margin of error for this variable is 7.5% (at 95% confidence level).

Multivariate analysis showed that businesses with two or more locations were less likely to turn off computers that are not in use than were single location businesses.

Action Taken –BY– Number of Locations ($p < 0.010^*$)			
Action Taken	Number of Locations		
	1 (%)	2 (%)	3+ (%)
Always or usually turn off computers	65.4	42.1	47.1

The margin of error for this variable is 7.5% (at 95% confidence level).

* Significant at > 99% confidence level.

Multivariate analysis showed that businesses with less than ten employees were more likely to turn off office equipment and appliances, than were businesses with 10 or more employees. And companies with 30 or more employees were least likely to turn off office equipment and appliances.

Action Taken –BY– Number of Employees ($p < 0.010^*$)					
Action Taken	Number of Employees				
	1-4 (%)	5-9 (%)	10-19 (%)	20-29 (%)	30+ (%)
Always or usually turn off office equipment and appliances	77.6	86.1	61.9	63.6	44.4

The margin of error for this variable is 7.5% (at 95% confidence level).

* Significant at > 99% confidence level.

Current Energy Opportunity Awareness at Business Location

The survey showed that half (50.3%) of the PUD's commercial customers responded that they were not aware of any energy saving opportunities at their business location(s) for the five classes of efficiency and energy conservation surveyed. (This number is likely to underestimate the actual level of opportunity present due to customers' lacking knowledge of the range of potential opportunities available.)

Among those 49.7% who were aware of one or more efficiency and energy conservation opportunities at their business, area of interest are as follows:

Are you aware of any energy efficiency or energy conservation opportunities at your business?	
Opportunity	%
Energy efficient lighting	60.1
Energy efficient windows	50.3
More efficient appliances	43.4
Heating system improvements	41.7
Wall, floor or ceiling insulation	37.8

The margin of error for this variable is 7.5% (at 95% confidence level).

We suggest that the PUD thus has marked conservation and efficiency improvement opportunities across multiple areas of commercial energy conservation, provided the PUD can increase awareness and motivate commercial customers to participate.

Despite energy efficient lighting opportunities being so heavily promoted across much of the USA during recent years, Clallam County PUD commercial customers still appear to underutilize the opportunity.

Motivation strategies should be re-evaluated and strengthened. Being relatively easy to implement and often at lower relative cost compared to other options, energy efficient light utilization might be a useful benchmark to evaluate the effectiveness of motivation strategies. Strategies that prove effective could then be tested with other categories. Do commercial customers clearly understand and appreciate the cost to benefit ratio of installing energy efficient lighting? Or can barriers to entry for installation be effectively reduced?

Anticipated Energy Efficiency Investment During Next Year

Investment Plan

Among of the commercial customers surveyed, 18% plan to invest in energy efficiency improvements in their facilities over the next year, 70% were not planning to make such investments, and 13% were not sure whether or not their organization will make energy efficiency improvements.

Do you have any plans to invest in energy efficiency improvements in facilities in 2010?	
Response	%
No	70
Yes	18
Don't know	12

The margin of error for this variable is 7.5% (at 95% confidence level).

Multivariate analysis showed two significant interactions with business sector and business size. Commercial customers in Manufacturing and Industrial business sectors were significantly more likely to plan on making energy efficiency improvements compared to businesses in the commercial and retail sectors.

Factor Rating –BY– Business Sector ($p = 0.030^*$)				
Factor Rated	Business Sector (%)			
	Commercial	Commercial Retail	Industrial & Manufacturing	Other
Anticipate energy efficiency investment	9.8	12.5	38.5	25.5

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at 97% confidence level.*

Business with twenty or more employees were significantly more likely to invest in energy efficiency than compared to smaller businesses.

Factor Rating –BY– Number of Employees ($p = 0.002^*$)					
Factor Rated	Number of Employees				
	1 - 4 (%)	5 - 9 (%)	10 - 19 (%)	20 - 29 (%)	30 + (%)
Anticipate energy efficiency investment	17.5	14.7	10.0	55.6	62.5

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at > 99% confidence level.*

Anticipated Energy Savings Result

Among commercial customers who plan to invest in energy efficiency improvements during 2010 more than half (52%) do not know the percent of energy that they might save once efficiency improvements are implemented.

There was extremely wide variation in anticipated extent of energy savings from improvements. The average energy savings anticipated was 14.9% ± 16.7% (standard deviation). The large standard deviation was generated by 30% of customers anticipating 10% or less savings, 13% anticipating 20% or more savings, and 9% anticipating 0 to only 1% savings.

What percent of your energy use do you expect to save annually once you implement these improvements?	
Expected Savings (%)*	Responses (%)
0	4
1	5
5	10
10	8
15	11
20	8
60	5
Don't know	52
*Mean	14.9
Std. Dev.	16.7

*The margin of error for this variable is 19.0% (at 95% confidence level).
Only respondents who plan to invest in energy efficiency answered question (n = 26)*

These results suggest that not understanding the extent or underestimating the value of savings might be currently be providing commercial customers with insufficient motivation to invest.

Interest in Planning Assistance from PUD

Among commercial customers who plan to invest in energy efficiency improvements next year, well more than half (62%) could potentially be interested in PUD assisting with the planning of energy efficiency improvements.

Would you be interested in the PUD assisting you in developing an energy efficiency improvement plan?	
Response	%
Yes	62.0
No	38.0

*The margin of error for this variable is 19.0% (at 95% confidence level).
Only respondents who plan to invest in energy efficiency answered question (n = 26)*

Energy Efficiency Incentive Program Participation & Awareness

Participation Level

The majority of respondents (77.1%) reported not yet having participated in PUD energy efficiency incentive programs. Thus, with the right strategy development, there appears to be significant opportunity for the PUD to increase participation.

Have you participated in the PUD energy efficiency incentive programs?	
Response	%
Yes	22.9
No	77.1

The margin of error for this variable is 7.5% (at 95% confidence level).

Among those 22.9% respondents who have participated in energy efficiency programs, 44.1% used the incentives for improving lighting, 20.6% upgraded windows, 17.6% installed heat pumps, 11.8% upgraded appliances, and 8.8% improved insulation.

Participated in PUD Energy Efficiency Programs	
Program Type	%
Lighting	44.1
Windows	20.6
Heat pump	17.6
Appliances	11.8
Insulation	8.8

*The margin of error for this variable is 16.3% (at 95% confidence level).
Only among those who are participated in PUD incentive programs answered this question (n = 35).*

Lighting efficiency has thus been the major focus so far for commercial customers. Given the high focus in the field for lighting efficiency opportunities, this suggests that education and incentive programs might also potentially be effective for other underutilized program areas.

Awareness: Energy Efficiency Retrofit & New Construction Project Program

Only about half of those surveyed (54.3%) are aware of PUD incentive and rebate programs that pay a share of the cost of qualifying energy efficiency improvements in retrofit or new construction projects for commercial and industrial customers.

Are you aware of the PUD's incentive and rebate programs that pay a share of the cost of qualifying energy efficiency improvements in retrofit or new construction projects for commercial and industrial customers?	
Response	%
Yes	54.3
No	45.7

The margin of error for this variable is 7.5% (at 95% confidence level).

Major Reason for Not Participating (Lack of Awareness)

Among those who have not participated in programs yet, half of customers (45.8%) said they did not participate due to lack of awareness of programs. Only 6.3% stated that they had completed all energy efficiency measures possible and 7.0% stated that they had no needs (thus 93% have known needs!).

Other barriers stated include: 9.8% lack the time necessary to be involved in such programs, 9.7% not the property owners, 7.9% lacked funds, and less than 1% reported too much hassle/paperwork or inadequate incentive (thus customers suggest that incentives may already be perceived as sufficient).

Why have not participated in PUD energy efficiency incentive programs?	
Response	%
Didn't know about the programs	45.8
Lack of time	9.8
Not the property owner	9.7
Lack of funds	7.9
No need	7.0
Completed all energy efficiency measures possible	6.3
Too much hassle/paperwork	0.8
Incentive rate isn't adequate	0.8
“Other”	11.1

The margin of error for this variable is 9.0% (at 95% confidence level).

Collectively these results suggest excellent program potential through increasing commercial customer awareness of these opportunities. Besides increasing awareness, it is critical communicate the likely energy and commercial money savings, so that there is sufficient incentive to motivate the customers.

For those selecting “Other”, specific reasons stated for not participating in PUD energy efficiency programs are listed below.

- *They always come with strings attached. I'm getting a generator and I'm probably going to move to a different state.*
- *That would require updates and we can't do that yet.*
- *We are a privately owned business.*
- *We just haven't done that but we were talking about going to oil heating.*
- *The profits are for the community this is a non profit business.*
- *We're waiting till our clubhouse permit comes through.*
- *I don't know much about them, and we may not qualify.*
- *None that were available for us at the present time.*
- *Already energy efficient*
- *New building*
- *Already done*
- *Our club has a little cabin where we use just little electricity. We use a light and a slide projector a few times a year.*

How Customers Learn about Incentive Programs

How Learned about Programs

Respondents who were aware of the incentive and rebate programs were asked to state how they have learned about these incentive programs. The largest number of customers became aware of programs from direct mail (25.5%) or directly from PUD staff (22.9%). Next most common was by word of mouth (15.1%) and newspaper ads (12.0%). Other less common sources (under 8% each) were through contractors or industry associations. Website and radio or TV were among the least common methods reported (under 3% each).

How did you learn about the programs?	
Method	%
Direct mail	25.5
PUD staff	22.9
Word of mouth	15.1
Newspaper ads	12.0
Contractor	7.8
Industry associations	4.1
Website	2.9
PUD website	2.9
Radio or TV	2.5
Other	4.3

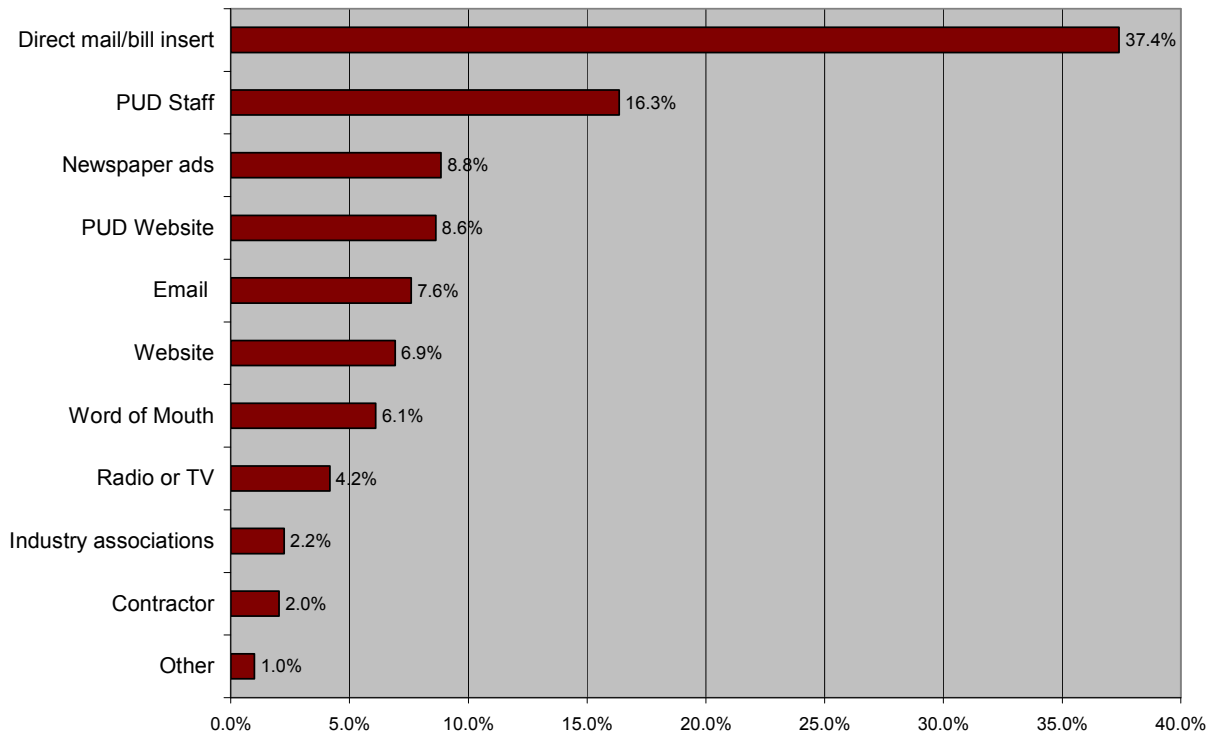
The margin of error for this variable is 10.8% (at 95% confidence level).

Only among those who are aware of PUD rebate programs answered question (n = 76).

Preferred Learning Methods

Respondents most commonly indicated that they preferred to learn about PUD incentive and rebate programs by direct mail (includes bill insert verbatim answers). The next most significant preference was directly from PUD Staff (16.3%). Less preference was stated for newspapers, websites, e-Mail, or “other” methods (less than 10% in each category). Many organizations invest extensively in website development to provide for information dissemination. The survey results suggest that direct mail strategies will likely be more productive as the first approach.

What is the best way to help you learn about such programs?



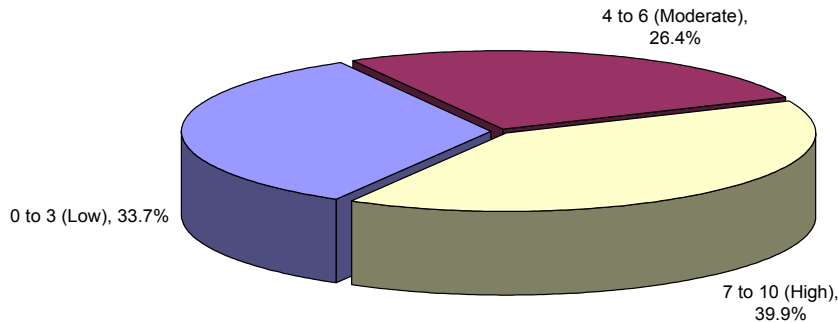
*The margin of error for this variable is 10.8% (at 95% confidence level).
Only among those who are aware of PUD incentive and rebate programs
answered question (n = 76).*

Interest in Potential Energy Efficiency Training Seminars

Attendance Likelihood

Survey respondents were asked to rate their likelihood to attend free or low cost PUD sponsored energy-efficiency related training seminars. On average, respondents were only moderately likely to attend (4.97 rating, on a 0 - 10 scale). However, high likelihood to attend was reported by 39.9% of participants (rating 7 - 10), moderate likelihood by 26.4%, and low likelihood only by 33.7% (rating 0 - 3).

How likely is it that you or one of your team members would attend a free or very low cost PUD sponsored energy-efficiency related training session (i.e., lighting, HVAC, controls) if the topic is of interest to you, and the location and timing are convenient to you?



The margin of error for this variable is 7.5% (at 95% confidence level).

Multivariate analysis suggested that commercial customers within the commercial retail and ‘other’ sectors were among more likely to attend the training sessions. Whereas, businesses in the industrial and manufacturing sector were less likely to attend.

Factor Rating –BY– Business Sector ($p = 0.036^*$)				
Factor Rated	Business Sector			
	Commercial	Commercial Retail	Industrial & Manufacturing	Other
Likelihood to attend training	4.1	5.8	3.3	5.5

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at ~96% confidence level.*

Seminar Topics of Interest

Of the topics suggested, by far the most popular topic was how to in general save energy, followed by saving money. Single focus or limited range topics showed less interest.

Topics of Interest for Training Seminars	
Topic	%
Saving energy	30.3
Saving money	15.7
Lighting	11.1
Rebates	8.9
HVAC, heating	7.8
Solar	5.6

The margin of error for this variable is 9.9% (at 95% confidence level).

Excludes those respondents who rated 0 for likelihood to attend the training seminar.

“Other” topics of interest specifically stated by commercial customers include the following:

- *All topics*
- *Assistance plans*
- *Control systems*
- *Energy efficiency, and how to cut costs. Also, being environmentally sound. Also, we are planning an addition to our facility in Clallam County. We are planning an addition to the telecommunication tower. We rent these towers out to our customers.*
- *Energy efficient office machines and lighting.*
- *Equipment efficiency.*
- *Equipment*
- *Refrigeration*
- *How and why we end up in a place where we don't want to be such as a power outage etc?*
- *I would be interested in whatever they come up with.*
- *Insulation*
- *Just to stay updated*
- *Knowing about rebates for commercial operations. Information on energy star appliances and those aerators.*
- *Refrigeration*
- *That would a question that only the owner, Edward Boyd, could answer.*
- *Windows*

Interest in Being Contacted about Topics Raised During Survey

Approximately 20% of respondents were interested in being contacted by a PUD representative to further discuss program topics raised during the survey. Among those showing interest, they were most commonly interested in energy efficiency (24.2%). This was followed by incentive and rebate programs (17.3%), lighting (15.8%), heating and air conditioning systems (14.4%), window insulation (12.2%), and structural insulation (10.7%). Refrigeration efficiency was the least popular topic (5.5%).

Would you like to be contacted to discuss any of the topics discussed today?	
Response	%
No	80.3
Yes	19.7

The margin of error for this variable is 7.5% (at 95% confidence level).

Program Topics of Interest	
Topic	%
Energy efficiency programs	24.2
Rebates & incentive programs	17.3
Lighting programs	15.8
Heating, ventilating and air conditioning systems	14.4
Window insulation	12.2
Structural insulation	10.7
Refrigeration efficiency	5.5

*The margin of error for this variable is 18.3% (at 95% confidence level).
Only among those who would like to be contacted.*

Multivariate analysis showed that businesses in the commercial retail sector were among the most interested in being contacted by a PUD representative, whereas businesses in the manufacturing and industrial sector were not interested to further discuss topics in the survey.

Interest in Being Contacted –BY– Business Sector ($p = 0.030^*$)				
Factor Rated	Business Sector (%)			
	Commercial	Commercial Retail	Industrial & Manufacturing	Other
Interest in Being Contacted	8.2	21.4	0.0	28.1

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at 97% confidence level.*

Multivariate analysis further showed that businesses with two or more locations were significantly more likely to be interested in being contacted by a PUD representative than were businesses with only a single location.

Interest in Contact –BY– Number of Locations ($p = 0.013$)			
Factor Rated	Number of Locations		
	1 (%)	2 (%)	3 + (%)
Interest in contact	7.6	30.0	35.3

The margin of error for this variable is 7.5% (at 95% confidence level).

** Significant at 97% confidence level.*

Summary – Commercial Customer Survey

1. Commercial Respondent Profile

- Commercial Retail and Commercial Office are among the single largest business sectors in survey, together totaling 29% of respondents.
- More than half of the businesses had their primary business locations in the Sequim service area (58%), followed by Port Angeles and Forks (18% each).
- The majority of businesses have less than 10 employees (72%) with 46 having less than five employees.
- The majority of businesses (68%) only have only a single location in the service area, with 17% having two locations.
- The Sequim service area, which has the highest number of primary business locations, also typically had the highest percent of businesses within each category for employee number or number of locations.
- The exception was Forks which had a similar number of businesses having 30+ employees.

2. Major Facility & Equipment Investment Plans

- The majority (81%) of businesses surveyed do not anticipate any major facility or equipment investments over the next year.
- Those planning investments included facility additions (10%), equipment upgrades (9%), and major renovations (4.3%).
- Among those planning investments, Sequim based businesses reported the highest number for facility additions (67%), Forks highest for major renovations (50%), and Sequim and Forks highest for equipment upgrades (36% each).

3. Contact with PUD

- Just over one third of the business customers surveyed (36%) were in contact with the PUD during the last year.
- The average number of times contacted was 1 or 2 times per year (1.6 average).
- The majority (84%) of respondents who contacted the PUD called during business hours.
- During their most recent call 41% called in regard to power outages, 22% had billing or payment questions, and new service and load additions or energy conservation each accounted for 10% of calls.
- Customer service was the major (68%) point of contact with 9% experiencing the voice message unit.
- Customers contacting the PUD gave a very high satisfaction rating during their last contact of 8.99, on a 0 to 10 scale for courtesy and willingness to assist.
- When calling about a power outage, they rated the PUD's ability to restore power in a timely fashion at 7.86.

4. General Satisfaction with PUD Services

- In general the great majority of respondents are highly satisfied with the services provided by the PUD, in all service categories.

- The overall satisfaction rating was 9, on a 0 to 10 scale.
- The lowest satisfaction rating received of 8 was still high for providing reasonable prices and rates.
- The highest average rating was for providing accurate, understandable, and timely billings.
- Sequim reported marginally higher satisfaction rates than average.
- Whereas Clallam Bay / Seiku / Neah Bay were marginally lower.
- Larger businesses with 20 or more employees and businesses with 3 or more locations reported marginally lower satisfaction rates than did smaller businesses.

5. Power Outage Effect of on Satisfaction

- The average number of power outages reported through the PUD service area was 2.2.
- Nearly a third (30%) of respondents did not recall any power outages.
- Roughly half (48%) of the respondents reported 1 to 3 power outages.
- Less than one fifth (18%) of respondents reported 4 or more power outages.
- Just fewer than 2% stated that they had 10 or more outages.
- Primary business locations in the Sequim service area reported the lowest average for outages experienced (1.3),
- Whereas, Forks (3.9) and Clallam Bay / Seiku / Neah Bay (3.4) had the highest the highest.
- As the number of power outages increased ratings decreased for providing reliable power and restoring power as quickly as possible.
- The threshold for satisfaction beginning to decrease appears to occur between 2 to 3 power outages.
- The marginal downward trend with increased outages for decreased overall satisfaction with PUD services, was less pronounced and found not to be significant.

6. How Customers Learn about Energy-Related Products & Services

- The most common sources used in general to find information about energy-related products and services was the PUD (23%), followed by internet (19%), newspapers (15%), word of mouth (13%) and radio/TV (9%).
- Other categories tested scored under 7% each.
- The Port Angeles “Peninsula Daily News” was the most common newspaper specified (96%), followed by Sequim Gazette (18%) and Seattle Times (11%).

7. Perception Why PUD Promotes Energy Efficiency & Conservation

- The most common perceptions for why the PUD promotes energy programs were “right thing to do” (48%) and “save customers money” (47%), followed by “save PUD money” (37%) and “PUD required” (33%).

8. Customer Willingness to Pay for Using Renewable Energy Sources

- Only 25% of commercial customers stated that they were willing to pay an extra \$25 in their monthly bills for utilizing new renewable energy sources.
- Only 8% (primarily larger businesses) were willing to pay more than \$25.
- About one third of respondents (37%) were either not willing to accept any rate increase or were undecided (30%).

- Businesses with three or more locations were more willing to pay \$26 or than businesses with less locations.

9. Energy Efficiency & Conservations Actions Taken During Last Five Years

- Many businesses surveyed have taken some form or energy efficiency action in the past five years.
- Most commonly (20%) they have installed energy efficient lighting.
- Whereas, 13% turned down the water heater, 12% installed a programmable thermostat, and 11% purchased energy star office equipment.
- There was wide variation in anticipated extent of energy savings from improvements. The average energy savings anticipated was about 15%.

10. Ongoing Energy Efficiency Actions Taken

- The majority of respondents (76%) also participate in some form of ongoing energy efficiency action.
- Turning off lights in unused rooms or spaces (76%), turning down the heat when leaving (68%), and turning off office equipment and appliances (62%) or computers when not in use (51%) were the most common actions.
- Businesses with a single location and less than 30 employees were more likely to take such actions than businesses with more locations or more employees.

11. Energy Efficiency & Conservation Opportunities at Business Location

- Half of businesses reported that they were not aware of any energy saving opportunities at their location.
- Of those respondents who were aware of opportunities at their business location(s), all five categories surveyed reported about 40 to 60% opportunity.

12. Anticipated Energy Efficiency Investment

- Only 18% of businesses currently plan to invest in energy efficiency improvements during 2010, and 12% are undecided.
- The highest likelihood for investment was reported for the industrial and manufacturing sector (39%) and for businesses with 20 or more employees (> 50%).
- The majority of businesses (52%) have no idea of the percent energy savings that will be achieved with their investment.
- Those guessing expect $15\% \pm 17$ (standard deviation) savings.

13. Energy Efficiency Program Awareness & Participation

- The majority (77%) have not yet participated in any energy efficiency program.
- Only 6% of businesses reported completing all energy saving measures possible (in context with these programs) for their business.
- Among the 23% who have participated in programs, the highest use was for lighting (44%), followed by window (21%), heat pump (18%), appliance (12%) and insulation (9%) programs.
- Only half of those surveyed (54%) were aware of PUD programs for energy efficiency improvement with retrofit or new construction projects.

14. Reasons for Not Participating in Energy Efficiency Programs.

- Participants reported not participated in energy efficiency programs primarily due to lack of program awareness (46%).
- All other factors reported as barriers to participation in efficiency incentive programs were individually minor. They included lack of time (10%), not being the property owner (10%), lack of funds (8%), and too much hassle/paperwork (0.8%) or the incentive being inadequate (0.8%).
- However, since they are significant in total to successfully increase program use the PUD's strategy would need to collectively address them.

15. How Learned about PUD Incentive & Rebate Programs

- Respondents indicated they most commonly learned about programs by direct mail (includes bill inserts) (26%), followed by directly from PUD Staff (23%), word of mouth (15%), newspaper ads (12%), contractors (8%) and industrial associations (4%).
- Websites and radio / TV were uncommon learning methods (less than 3% each).

16. Preferred Methods to Learn about PUD Incentive & Rebate Programs

- Respondents indicate they preferred to learn about PUD incentive programs by most commonly by direct mail (includes bill inserts) (38%).
- This was followed by directly from PUD Staff (16%), newspapers (9%), PUD website (9%), and e-Mail (8%).
- All other methods scored under 7% each.

17. Interest in Potential PUD Efficiency Training Seminars

- Among participants surveyed, 40% responded that their business would be highly likely to attend potential energy-efficiency training sessions, and 26% reported moderate likelihood for attending.
- The commercial retail sector was the most likely to attend (5.8 rating).
- The industrial & manufacturing sector marginally less likely to attend (3.3 rating).
- Among those reporting interest, the most common topic of interest was for saving energy in general (30%), followed by saving money (16%).
- The other topic titles presented showed 5 to 11% interest each.

18. Interest in Being Contact about Topics Raised During Survey

- Only 20% of respondents were interested in being contacted by a PUD representative to discuss any specific topics raised during the survey.
- These individuals were most commonly interested in energy efficiency (24%), followed by incentive and rebate programs (17%), lighting (16%), heating and air conditioning systems (14%), window insulation (12%), and structural insulation (11%).
- The commercial retail sector and "other (sectors)" showed the highest interest (21 to 28%).
- Whereas, commercial (8%) and industrial & manufacturing (0%) showed the least interest.

Appendix A – Survey Questionnaire

Hello my name is _____ I work for Hebert Research, a market research firm in Bellevue. We are conducting research for Clallam County PUD with their commercial and industrial customers like you to collect your opinions regarding Clallam County PUD's current services. Are you the person responsible for electric energy management for your organization? If not, can you direct me to the appropriate person? This interview will take approximately 15 minutes. Is now a convenient time for you? Thank you.

Q1. What is your title? _____

Q2. What industry is your company in? [BASED ON CUSTOMERS' RESPONSE SELECT ONE, AND VERIFY IT] [Please refer to "NAICS Segment Descriptions" sheet for detailed descriptions of these segments]

1. Commercial Warehouse
2. Commercial Grocery
3. Commercial Eating/ Drinking
4. Commercial Hotels
5. Commercial Hospitals
6. Commercial Schools
7. Commercial Retail
8. Commercial Office
9. Manufacturing
10. Industrial Food
11. Industrial Lumber
12. Industrial Paper
13. Industrial stone, clay, glass
14. Industrial Metals
15. Industrial Transportation
16. Industrial Other
Other Agriculture, Forest,
17. Mining
18. Other Construction
19. Other

Q3. How many employees do you have in Clallam County and/or Jefferson County?
[RECORD NUMBER]

Q4. If you have more than 1 business location in Clallam County and Jefferson County, how many do you have? [RECORD NUMBER]

Q5. During the last 12 months, how many times, at your location has your power gone out for more than 5 consecutive minutes? [RECORD NUMBER]

Q6. How many times have you contacted or been contacted by a PUD representative in the last 12 months? [RECORD NUMBER] [IF ZERO, SKIP TO Q12]

When answering the next few questions, keep in mind the most recent interaction with the PUD in which you initiated the contact

Q7. For what reason did the contact with the PUD occur? Was it....

1. New service or load additions
2. Billing and payment
3. Energy conservation
4. Power Outage
5. Storm
6. Other, please specify _____.
7. Don't know

Q8. Did you deal with a customer service representative, a technician or engineer, or someone else?

1. Field Personnel (Skip to Q11)
2. Customer service (Skip to Q10)
3. Technician/engineer (Skip to Q10)
4. Energy Conservation Advisor (Skip to Q10)
5. Other [FILL IN]_____ (Skip to Q10)
6. Only got the Voice Message Unit
7. Don't know (Skip to Q10)

Q9) [IF Q8=6 (VRU)] Was the information on our voice message unit helpful/sufficient?

Q10) Did you call during or outside business hours?

Using a 0 to 10 scale where 0 means not at all satisfied and 10 means very satisfied, how satisfied were you with your recent interaction with the PUD, in regard to the following: [READ] [RECORD NUMBER]

Q11) Courtesy and willingness of the customer service representative to listen to you during your last contact with them?

Q12) If the recent contact was to report a power outage, the PUD's ability to restore power in a timely fashion? [code 999 if doesn't apply]

Satisfaction Rating (Q13-Q24)

I am now going to read a list of different performance areas for electricity providers. Please rate the PUD's performance for each of following areas using the same 0-10 scale where 0 means not at all satisfied and 10 means very satisfied. [READ AND ROTATE] [RECORD NUMBER]

- Q13) Overall satisfaction with Clallam PUD power service
- Q14) Reasonable prices/rates
- Q15) Provided reliable power in the past 12 months
- Q16) Restored power as quickly as possible during the past 12 months
- Q17) Environmentally responsible
- Q18) Power quality
- Q19) Energy efficiency programs
- Q20) Providing accurate, understandable & timely billing
- Q21) Provides helpful information about rates.
- Q22) Easy to contact
- Q23) Responsiveness to your requests
- Q24) Technical knowledge/expertise

Q25) [IF SCORE 5 OR LESS ON ONE OR MORE OF THE ATTRIBUTES ASK]

You expressed low satisfaction or service reliability on one or more of the ratings. What could the PUD do to improve your satisfaction with the company? [VERBATIM]

Conservation Programs

Q26) Are you aware of any energy efficiency or energy conservation opportunities at your business? If yes, what are they?

- Wall, floor or ceiling insulation
- Energy efficient windows
- Energy efficient lighting
- Heating system improvements
- More efficient appliances

Q27) Do you have any plans to invest in energy efficiency improvements in your facilities in 2010?

Yes

No [SKIP to Q30]

Don't know [SKIP to Q30]

Q28) What percent of your energy use do you expect to save annually once you implement these improvements? _____ [RECORD PERCENTAGE]

Q29) Would you be interested in the PUD assisting you in developing an energy efficiency improvement plan?

- Yes
- No
- Don't know

Q30) During the next year which of the following are you planning: major equipment upgrades, major renovations, or facility additions?

- Equipment upgrades
- Major renovations
- Facility additions
- None
- Don't know

Q31) Are you aware of the PUD's incentive and rebate programs that pay a share of the cost of qualifying energy efficiency improvements in retrofit or new construction projects for commercial and industrial customers?

- Yes
- No, [SKIP TO Q33]
- Don't Know, [SKIP TO Q33]

Q32) How did you learn about the programs? [CHECK ALL THAT APPLY]

- PUD Staff
- Newspaper ads
- Website
- Direct mail
- Contractor
- Word of Mouth
- Industry associations
- PUD Website
- Radio or TV
- Other. Please Specify [FILL IN]_____

Q33) What is the best way to help you learn about such programs?

- PUD Staff
- Newspaper ads
- Website
- Direct mail
- Contractor
- Word of Mouth

Industry associations
PUD Website
Radio or TV
Other. Please Specify [FILL IN]_____

Q34. Have you participated in the PUD energy efficiency incentive programs?

Yes,
No, [SKIP TO Q36]
Don't Know [SKIP TO Q37]

Q35) IF YES, which program did you participated in? [RECORD ANSWER] [SKIP TO Q37]

Q36) IF NO, why haven't you participated?

Lack of funds
Too much hassle/paperwork
Lack of time
Incentive rate isn't adequate
Completed all energy efficiency measures possible
Didn't know about the programs
Other. Please Specify [FILL IN]_____

Q37) Which of these additional energy efficiency actions, if any, have you taken in the past 5 years?

Installed new windows
Added insulation to walls, floors or ceilings
Purchased ENERGY STAR kitchen or lunchroom appliances
Purchased ENERGY STAR office equipment such as computers, printers, etc.
Installed energy efficient lighting
Turned down the water heater
Installed a programmable thermostat
Installed low-flow faucet aerators
Other

(Q38 – Q42) Please tell me how often (always, usually, sometimes, never) you encourage employees to do the following:

- Q38) Turn down the heat when you leave the office
- Q39) Turn off the lights in unused rooms or spaces
- Q40) Turn off computers when it's not in use
- Q41) Turn off office equipment or appliances when not in use
- Q42) Unplug appliances, device chargers or power strips when not in use

Q43) If Clallam PUD were to offer short informal information exchanges/meetings to help commercial and industrial customers better understand and manage their energy use.

Using a 0 to 10 scale where 0 means not at all likely and 10 means very likely? How likely is it that you or one of your team members would attend a free or very low cost PUD sponsored energy-efficiency related training session (i.e. lighting, HVAC, controls) if the topic is of interest to you, and the location and timing are convenient to you?
[RECORD NUMBER] [IF ZERO, SKIP TO Q46]

Q44). What topics would be of most interest to you? [VERBATIM]

Q45) Why do you think the PUD offers conservation programs and pays incentives to participate?

- Saves PUD money
- Saves customers money
- PUD is required to
- They believe it's the right thing to do
- Other [FILL IN] _____

Renewable Energy

Q46) How much of an increase in your monthly bill, if any, would you be willing to pay for the costs of new renewable energy sources? [SELECT ONE]

- None
- Up to \$25
- Up to \$50
- Up to \$100
- \$100 to \$150
- More than \$150

Q47) Where do you learn about energy-related products and services? [CHECK ALL THAT APPLY]

- PUD
- Word of mouth
- Newspapers. Please specify [FILL IN] _____
- Contractor
- Publications. Please specify [FILL IN] _____
- Internet
- Industry associations
- Radio or TV
- Other. Please specify [FILL IN] _____
- My contractor

Q48. Would you like to be contacted by a PUD representative to discuss any of the topics discussed today?

Yes

No [SKIP TO Q51]

Q49. Which topics are you interested in? [READ, CHECK ALL THAT APPLY]

- Energy Efficiency Programs
- Rebates & Incentives Programs
- Lighting programs
- Heating Ventilating and air conditioning systems
- Structural insulation
- Window insulation
- Refrigeration efficiency

Q50. For future contact by the PUD, may I have your full name, title, company name, and phone number please?

Full name: _____

Title: _____

Company: _____

Phone Number: _____

Q51. Finally, if you could send one message to the PUD what would that message be? [VERBATIM]

That concludes my questions. Thank you very much for your time and cooperation.
Completed Interview

END

POST CODE - RECORD GENDER

Male

Female