

2011 GPL BILL SURVEY REPORT

March 2011

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1. Introduction

Guyana Power & Light (GPL), the principal electric utility in Guyana, is a vertically integrated utility and is currently fully owned by the Government of Guyana. GPL's operation comprises generation, transmission and distribution. With the recent commissioning of the new 20.6 MW modern generating station at Kingston, GPL now has a total installed capacity of 163.47 MW.

GPL has embarked on a series of customer surveys (eight customer surveys in a two year period), to enable the organisation to obtain feedback from its customers on a regular basis. In this respect a contract was awarded to CEMCO Inc. to undertake the series of customer surveys. The first set of surveys (two surveys – GPL Customer Satisfaction Survey and GPL Call Centre survey) was completed in August and September 2010. This survey is part of the second set of surveys (two surveys – GPL Customer Satisfaction Survey and GPL Bill survey) which was completed in January and February 2011.

2. Objectives of the study

The primary objective of the 2011 January and February GPL Bill Survey is to measure customer perception/knowledge on a number of bill related issues over the past six months. Specific objectives include:

- GPL customers knowledge of the current GPL bill;
- GPL customers knowledge of how long after the bill date in the GPL bill due;
- When GPL customers receive their GPL bill;
- How GPL customers would like to access the GPL Bill information;
- Other pertinent issues.

3. Research methodology

3.1 Study Design

Data was collected from a representative sample of GPL customers using probability sampling. Concurrent surveys 3 and 4, were administered to the same target group, especially given the 3 month completion time frame for these surveys. There are benefits of administering both surveys to one target group (comparisons among survey groups possible, less field time etc).

Table 1: Survey respondents by Region

Region	Sample
2	50
3	48
4	192
5	19
6	80
7	11
Total	400

There are 135,884 (or 91.3%) Tariff A customers, 12,215 (or 8.2%) Tariff B customers, 349 (or 0.2%) Tariff C customers and 407 (or 0.3%) Tariff D customers. From this, the sample size per Tariff would be as given in line 3 in table 2 below for a 400 sample. However, one customer from Tariff C and one from Tariff D is not feasible so oversampling of these tariffs was done, as given in line 4 below.

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Table 2: Number of customers by Tariff in GPL database and sample

	Tariff A	Tariff B	Tariff C	Tariff D	Total
GPL Total	135,884	12,215	349	407	148,855
% of Overall Total	91.3%	8.2%	0.2%	0.3%	100%
Sample -400 customers	365	33	1	1	400
Suggested sample	345	33	10	12	400

From the GPL database, Tariff C and D customers was selected at random on a geographic basis (regional basis). Interviewers selected samples of Tariff B customers as suggested by the Survey Coordinator.

Table 3 gives number of Tariff B, C and D Customers by region in the sample (including “Georgetown” and “Region 4 excluding Georgetown”).

Table 3: Tariff B, C and D Customers by region in the sample

Sample (Tariff B, C, D) by regions	Tariff B	Sample	Tariff C	Sample	Tariff D	Sample
Regions 2, 3	2,277	6	32	1	34	1
Region 4	7,192	20	261	8	326	10
Georgetown	4,329	12	188	6	235	7
Region 4 excluding Georgetown	2,863	8	73	2	91	3
Regions 5,6	2,297	6	48	1	36	1
Region 7	426	1	3	0	0	0
Total	12,192	33	344	10	396	12

As recommended by Power Planning Associates (PPA) in its report - Section 9.3.5 page 45, a two stage sampling design was used with coastal areas of Guyana stratified by location (GPL district). A number of GPL districts was randomly selected from a list of GPL districts and then a sample (select with randomization) from each selected district chosen. A list of districts selected by the Team Leader/Survey Coordinator was submitted to GPL for perusal and approval. Each team of Supervisor and interviewers received a list of GPL Districts to be visited and instructions on obtaining the sample from each selected

District. A systematic random sample of houses (residential customers) from each selected district was done and persons age 16 to 65 in seven regions (2, 3, 4, 5, 6 and 7) thus selected was interviewed. A separate sample from each selected district was taken of the other categories of GPL customers (commercial and industrial customers).

For this survey, a sample size of 400 was used as required by GPL (and recommended by previous study undertaken by PPA – to get a confidence of 96% and a precision of the results of about 5%). Thus, a sample size of 400 was used - 345 residential customers (Tariff A), 33 Tariff B, 10 Tariff C and 12 Tariff D. The study design includes the collection of both qualitative and quantitative data.

3.2 Questionnaires

Questionnaires of moderate length – maximum four pages (in accordance with PPA report –Appendix 5 page 79) with multiple topics will be used for the collection of data for the surveys. CEMCO drafted the initial GPL Bill questionnaire in consultation with senior management of GPL which was then pretested and finalized.

The GPL Bill Survey questionnaire had two sections, a Demographic section and a GPL Bill section. The demographic section contained questions on location, age, gender and type of respondent; the Bill section contained a variety of questions relating to the GPL Bill such as GPL customers knowledge of the current GPL bill; GPL customers knowledge of how long after the bill date in the GPL bill due; When GPL customers receive their GPL bill; How GPL customers would like to access the GPL Bill information; and Other pertinent issues.

The questionnaires were pre-tested in December 2010 and based on the results of the pretest, minor modifications were made to the questionnaires. For the final questionnaires, see Appendix C.

3.3 *Fieldwork and processing*

A training manual was developed for use in training and distributed to all supervisors and enumerators to standardize data collection. Nine (9) enumerators were selected and each enumerator received a list of areas to visit. The field staff was trained and the field work commenced simultaneously in the various regions on Saturday 15th January, 2011. Data was collected through face to face interviews conducted by the trained enumerators. The Survey Coordinator provided overall supervision of the fieldwork.

All completed questionnaires were submitted by the enumerators and these forms were checked for omissions and errors then the data was entered using Microsoft Excel by a trained and experienced data entry operator. After data entry was completed, the tables were generated using Microsoft Excel 2007. The results of the survey were analyzed and presented in this report.

4 Results

4.1 Response Rates

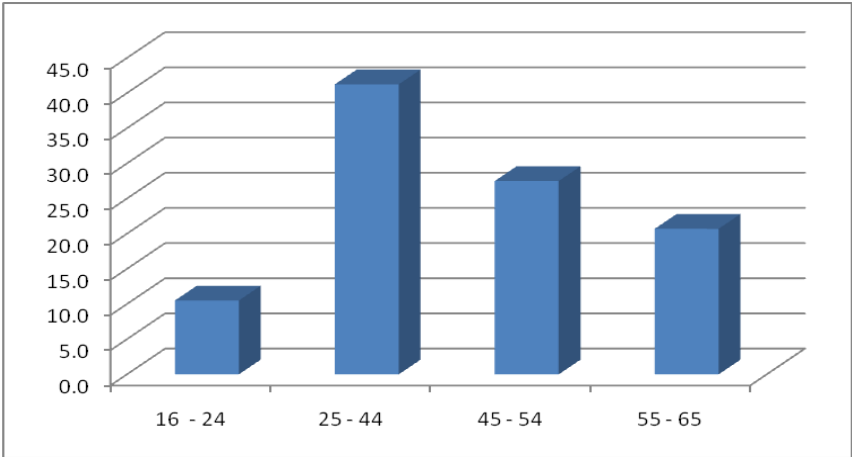
The goal was to interview four hundred respondents, eighteen persons declined to be interviewed giving a response rate of over ninety five percent. Enumerators conducted interviews in the regions, they reside in and this (in addition to being trained) may have contributed to the high response rate.

4.2 Sample Characteristics

The number of respondents in a region was relative to the GPL’s customer database. Table 1 in the Appendix presents the distribution of respondents by gender, 46 % (184) of the 400 respondents male, 54 % (216) were female.

Table 2 presents the distribution of respondents by age, one respondent (aged between twenty five and sixty five) from each selected household was interviewed. 41 % of respondents were in the 25 – 44 age group and 79 % of the respondents were aged 25 – 54. Figure 1 shows the percentage of respondents by age.

Figure 1: Percentage of Respondents by Age



32.5% of respondents were from an urban area (Georgetown, New Amsterdam or Rose Hall) and 67.5% were from rural areas. The Guyana 2002 Census results show Guyana has 28.5% of the population located in urban areas with the remaining 71.5% of the population in rural areas.

4.3 Bill Survey Results

Below is an analysis of the results by question.

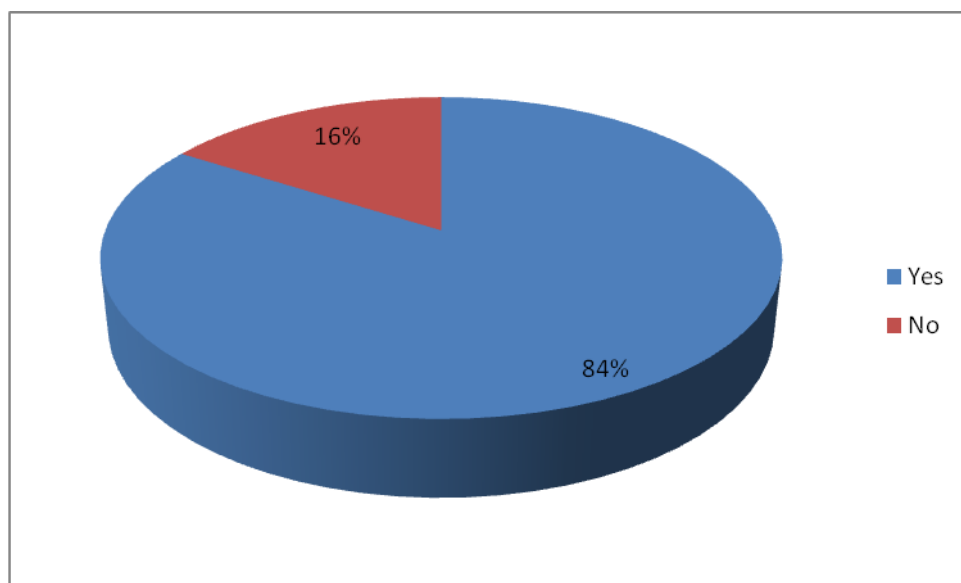
B.1 Are you aware that GPL has changed the presentation of the bill format in 2010?

GPL has changed the presentation of the bill format in 2010, the question respondents was asked “Are you aware that GPL has changed the presentation of the bill format in 2010?”.

Respondents’ summary responses were:

- ✚ 84% said Yes (were aware of new bill format)
- ✚ 16% said No (were not aware of new bill format)

Figure 2: Percentages of respondents by answer given



This indicated a high proportion of respondents were aware of the change of the GPL bill format.

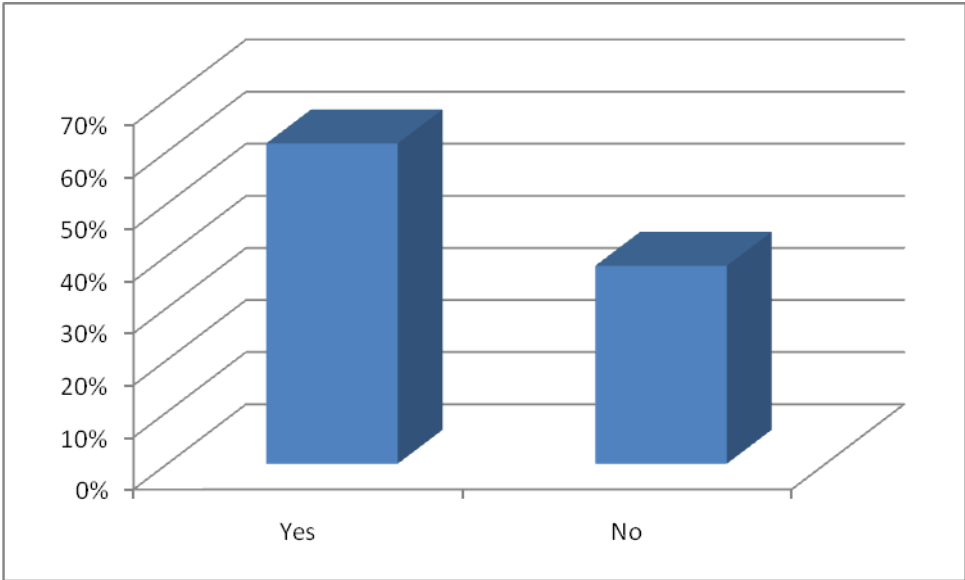
B.2 Are you aware that you have both an account number and a customer number in your current GPL bill?

GPL customers have both has an account number and a customer number in their current GPL bill, the question respondents was asked “Are you aware that you have both an account number and a customer number in your current GPL bill?”.

Respondents’ summary responses were:

- ✚ 62% said Yes (were aware they had both an account number and a customer number)
- ✚ 38% said No (were not aware they had both an account number and a customer number)

Figure 3: Percentages of respondents by answer given



This indicated a high proportion of respondents were aware had both an account number and a customer number, but nearly 40% of respondents were not aware they had both an account number and a customer number.

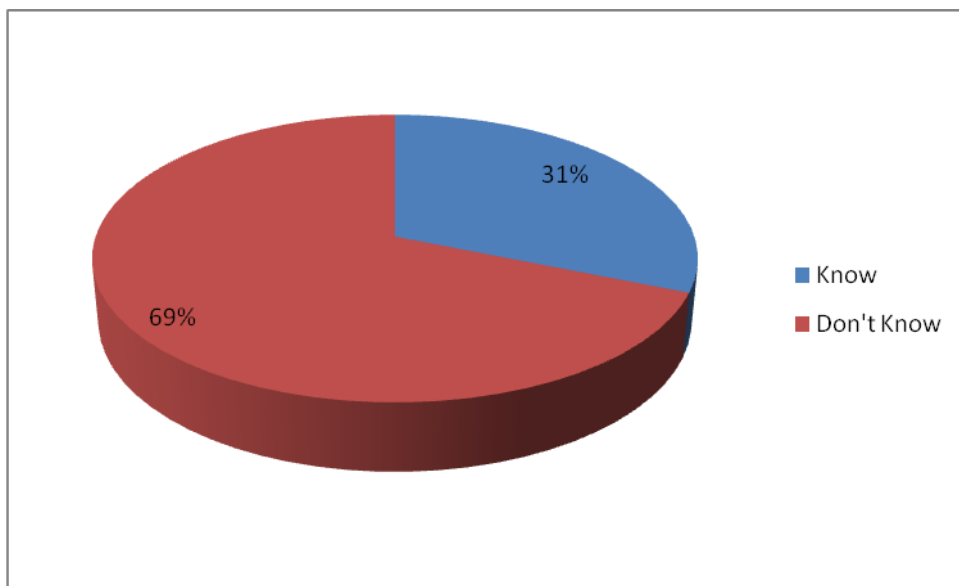
B.3 What does the customer number on the GPL bill represents?

This question seeks to know how many customers know what the customer number on the GPL Bill represents. This was an open ended question and the answer was coded “Know” or “Don’t Know”.

Respondents’ summary responses were:

- ✚ 31% said Know (they knew what the customer number on the GPL Bill represents)
- ✚ 69% said Don’t Know (they did not know what the customer number on the GPL Bill represents)

Figure 4: Percentages of respondents by answer given



Nearly 60% of respondents were aware had both an account number and a customer number, however, only 31% knew what the customer number on the GPL Bill represents.

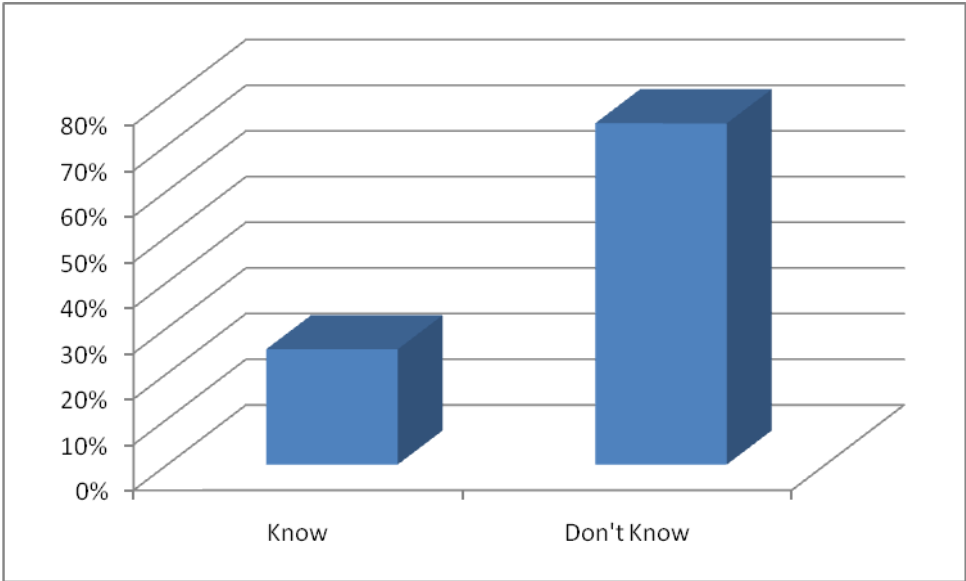
B.4 How many days after the bill date does the GPL bill becomes due?

This question seeks to know how many customers knew how long after the bill date does the GPL bill becomes due. This was an open ended question and the answer was coded “Know” or “Don’t Know”.

Respondents’ summary responses were:

- ✚ 25% said Know (they knew how long after the bill date the GPL bill becomes due)
- ✚ 75% said Don’t Know (they did not know how long after the bill date the GPL bill becomes due)

Figure 5: Percentages of respondents by answer given



This indicated a high proportion of respondents did not know how long after the bill date the GPL bill becomes due.

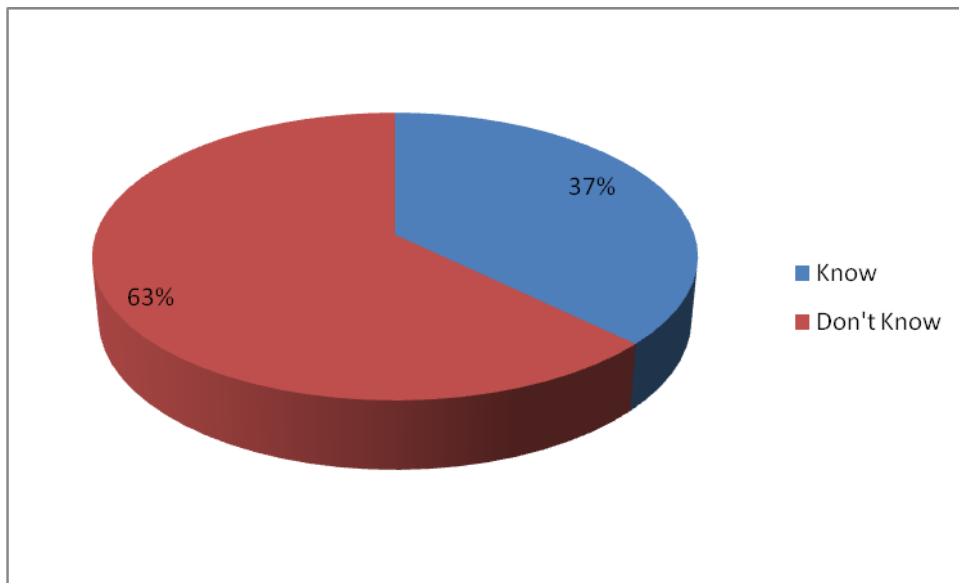
B.5 If your GPL bill has an “adjustment”, what could it represent?

This question seeks to know how many customers knew if their GPL bill has an “adjustment”, what it could represent. This was an open ended question and the answer was coded “Know” or “Don’t Know”.

Respondents’ summary responses were:

- ✚ 37% said Know (they knew if their GPL bill has an “adjustment”, what it could represent)
- ✚ 63% said Don’t Know (they did not know if their GPL bill has an “adjustment”, what it could represent)

Figure 6: Percentages of respondents by answer given



This indicated a high proportion of respondents did not know if their GPL bill has an “adjustment” what it could represent.

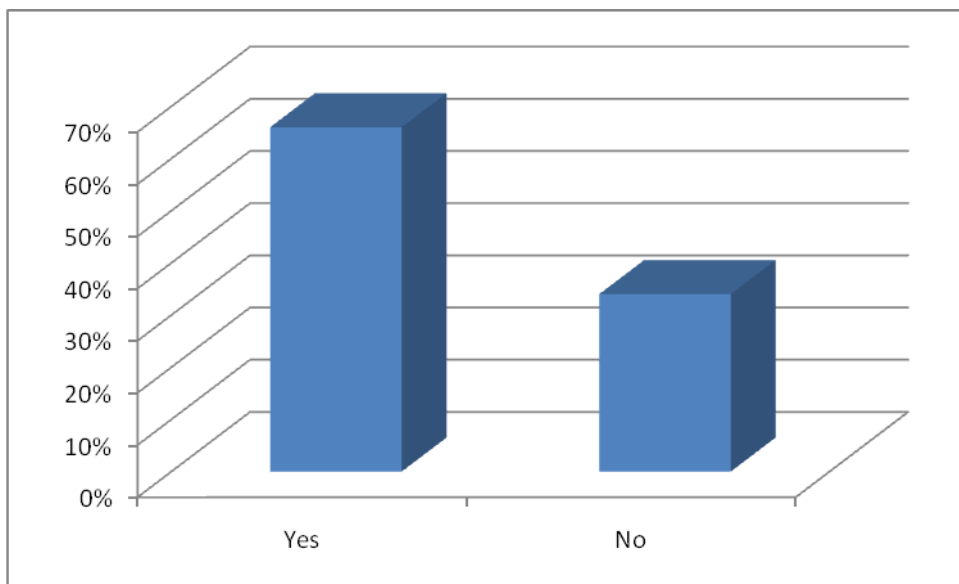
B.6 If you don't receive a GPL bill in January 2011 would you still go and make a payment to GPL?

This question seeks to know how many customers don't receive a GPL bill in January 2011 would still go and make a payment to GPL.

Respondents' summary responses were:

- ✚ 66% said Yes (customer don't receive a GPL bill in January 2011 would still go and make a payment to GPL)
- ✚ 34% said No (customers don't receive a GPL bill in January 2011 would not go and make a payment to GPL)

Figure 7: Percentages of respondents by answer given



Nearly two thirds of respondents who don't receive a GPL bill in January 2011 would still go and make a payment to GPL, however, a high proportion (one third) who don't receive a GPL bill in January 2011 would not go and make a payment to GPL.

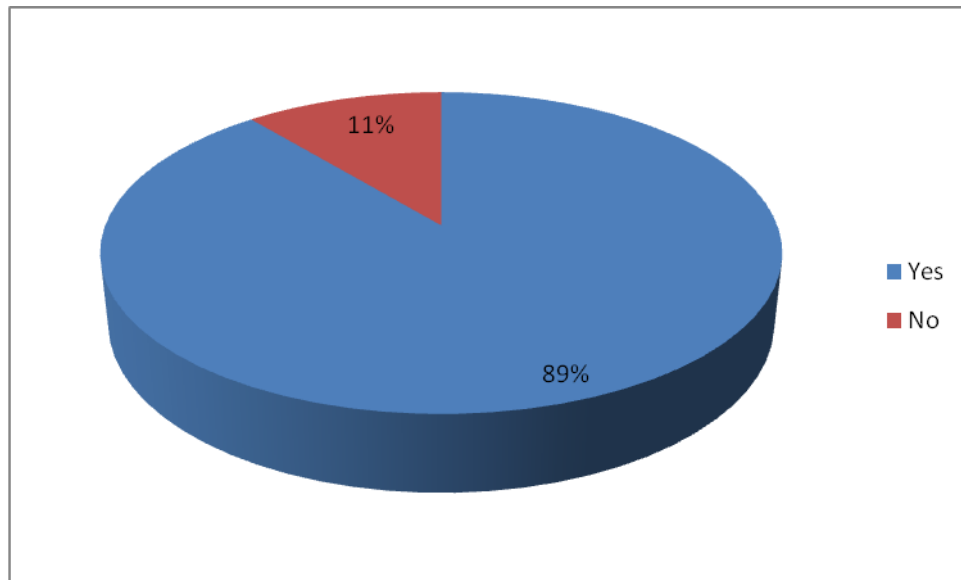
B.7 Do you normally receive your bill before the due date?

This question seeks to know, how many customers receive their GPL bill before the due date.

Respondents' summary responses were:

- ✚ 89% said Yes (customer receive their GPL bill before the due date)
- ✚ 11% said No (customer do not receive their GPL bill before the due date)

Figure 8: Percentages of respondents by answer given



Most respondents receive their GPL bill before the due date.

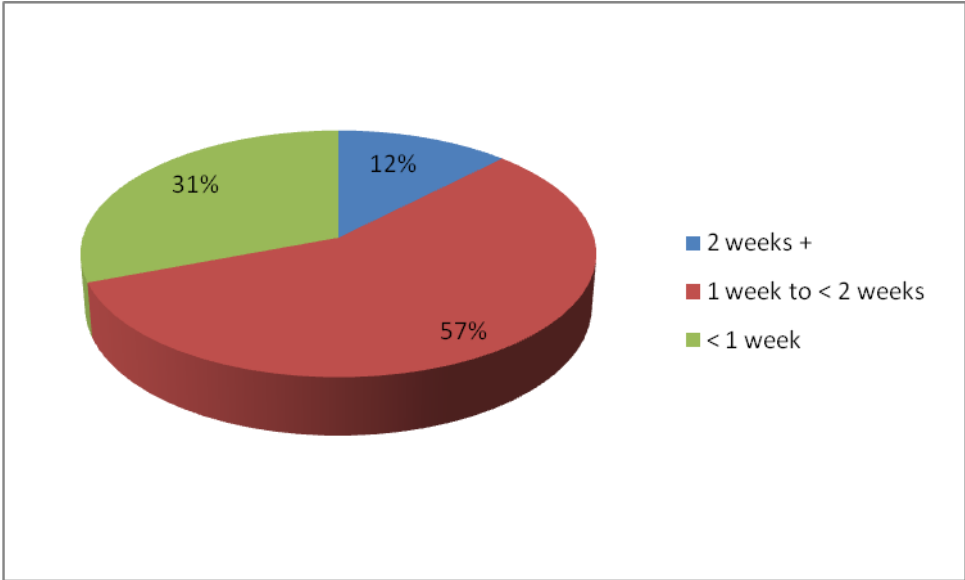
B.8 How long before the due date, do you usually receive your GPL bill?

This question seeks to know how long before the due date do customers usually receive their GPL bill. The due date of a GPL bill is 21 days after the bill date.

Respondents' summary responses were:

- ✚ 12% said 2 weeks or more than 2 weeks (customer receive their GPL bill 2 weeks or more than 2 weeks before the due date)
- ✚ 57% said 1 week to less than 2 weeks (customer receive their GPL bill 1 week to less than 2 weeks before the due date)
- ✚ 31% said less than 1 week (customer receive their GPL bill less than 1 week before the due date)

Figure 9: Percentages of respondents by answer given



Two third of respondents who receive their GPL bill receive it at least one week or more than one week before the due date, however, 40% of all respondents either do not receive their GPL before the due date or less than one week before the due date.

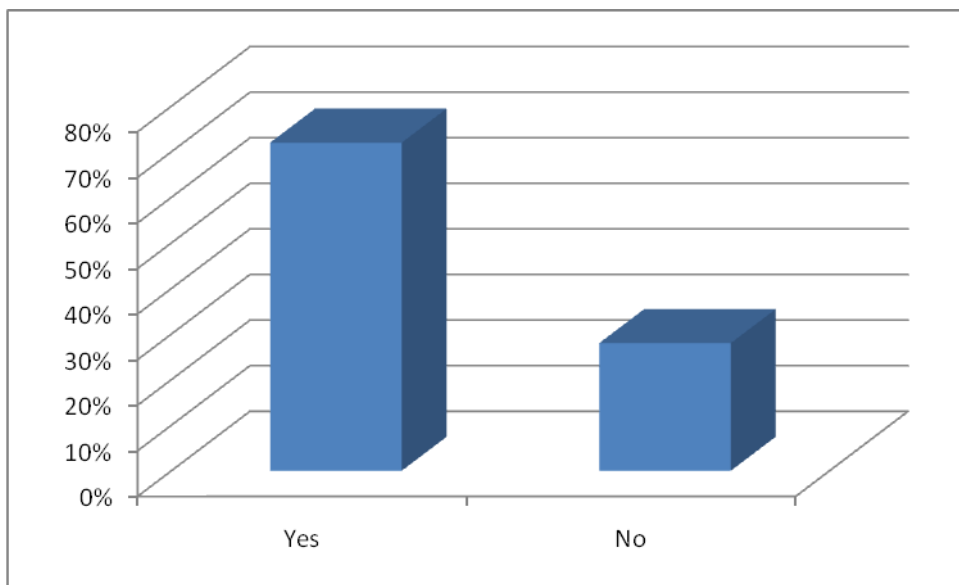
B.9 If GPL had an automated Bill Inquiry system that you could access by telephone, would you use it to get your bill information?

This question seeks to know if GPL had an automated Bill Inquiry system that customers could access by telephone, would customers use it to get their bill information.

Respondents' summary responses were:

- ✚ 72% said Yes (if GPL had an automated Bill Inquiry system that customers could access by telephone, customers would use it to get their bill information)
- ✚ 28% said No (if GPL had an automated Bill Inquiry system that customers could access by telephone, customers would not use it to get their bill information)

Figure 10: Percentages of respondents by answer given



Respondents were asked what is the reason for their answer. The comments were similar to those given below:

- ✚ Easier to use
- ✚ I prefer a bill
- ✚ I would be able to check my balance and pay my bill promptly
- ✚ I would not have to wait on a bill

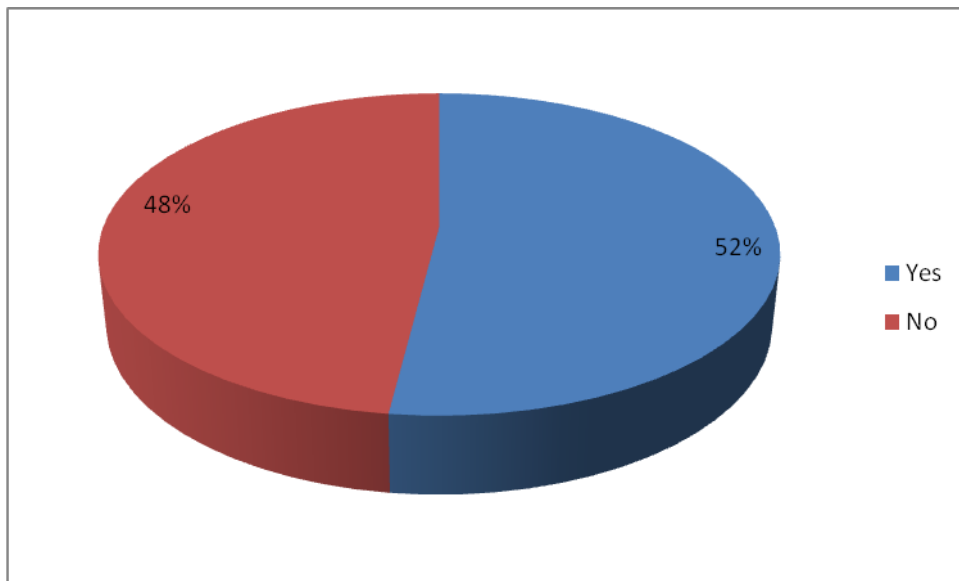
This question looks at an alternative method of getting bill information (not just the bill). If GPL had an automated Bill Inquiry system that customers could access by telephone, nearly three quarter customers would use it to get their bill information.

B.10 If you could get your bill information online using the internet (GPL website), would you use this system to get your bill information?

This question seeks to know if customers could get their bill information online using the internet (GPL website), would customers use this system to get their bill information.

Respondents' summary responses were:

- ✚ 52% said Yes (if customers could get their bill information online using the internet (GPL website), customers would use this system to get their bill information)
- ✚ 48% said No (if customers could get their bill information online using the internet (GPL website), customers would not use this system to get their bill information)

Figure 11: Percentages of respondents by answer given

Respondents were asked what is the reason for their answer. The comments were similar to those given below:

- ✚ Easier and convenient
- ✚ I do not have a PC
- ✚ I don't have access to a computer/internet
- ✚ Easy to access thus saving time

This question looks at an alternative method of getting bill information (not just the bill). If customers could get their bill information online using the internet (GPL website), only half the customers would use this system to get their bill information, far less than the number of GPL customers who would access by telephone to get their bill information, an automated Bill Inquiry system.

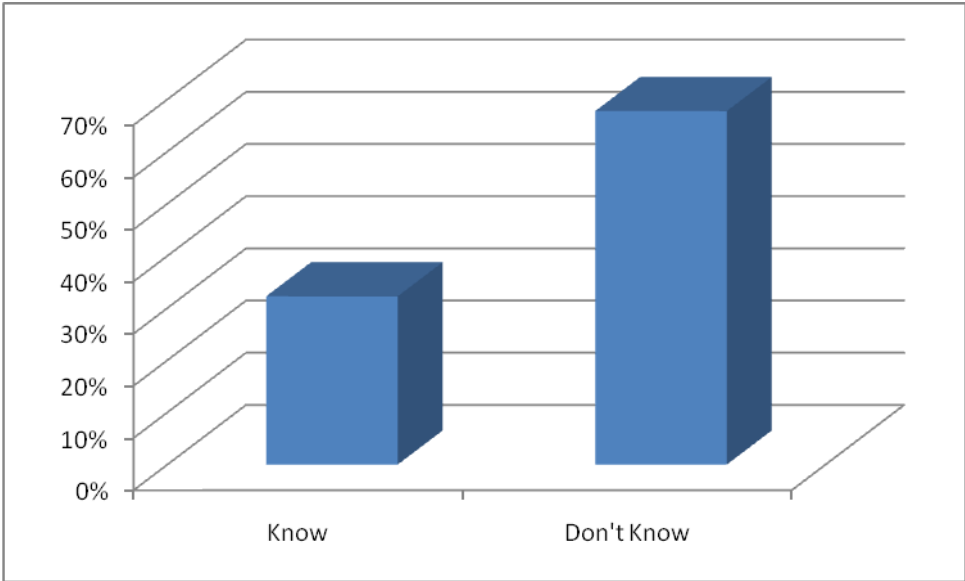
B.11 What is the current cost per kilowatt hour?

This question seeks to know if customers knew the current cost per kilowatt hour. This was an open ended question and the answer was coded “Know” or “Don’t Know”.

Respondents’ summary responses were:

- ✚ 32% Know (customers know the current cost per kilowatt hour)
- ✚ 68% Don't Know (customers do not know the current cost per kilowatt hour.)





Figure 12: Percentages of respondents by answer given



Nearly two third respondents do not know the current cost per kilowatt, a high proportion.

B12. How could the current GPL bill format be improved?

The comments were similar to those given below:

-  There is no need to change the format
-  No comment
-  Bill should be printed bright enough to read easily
-  Tint the amount of kilowatt used

5. Conclusion and Recommendations

GPL should be commended for implementing a new customer information system resulting in a new bill format. A high proportion of GPL customers were not knowledgeable about various aspects of their bill such as what the customer number on the bill represents.

Based on the information obtained by this study, the following recommendations are made:

1. Review survey results and examine ways GPL can utilize these results.
2. A high proportion of GPL customers were not knowledgeable about various aspects of their bill such as what the customer number on the bill represents, what an “adjustment” on the bill represents, thus there is a need to educate customers on the current GPL bill.
3. Give customers more ways to obtain bill information (via telephone and internet), bearing in mind customers may have a preference for using the telephone or using the internet. When these new ways of getting bill information is available, sensitize customers on them (for example, a leaflet on these new services given with a regular bill; newspaper, radio and TV announcements)
4. Consider giving customers 28 days from bill date to due date, this would allow customers more time from receipt of bill to due date. Carefully consider the financial implications for GPL in making such a change.
5. Educate customers on the need to still pay for electricity services received even if they have not received a bill.

APPENDICES***Appendix A*** ***Tables*****List of Tables**

Table 1:	Gender of Respondents
Table 2:	Age of Respondents
Table 3:	Urban/Rural composition of Respondents
Table 4:	Question B1
Table 5:	Question B2
Table 6:	Question B3
Table 7:	Question B4
Table 8:	Question B5
Table 9:	Question B6
Table 10:	Question B7
Table 11:	Question B8
Table 12:	Question B9
Table 13:	Question B10
Table 14:	Question B11

Table 1: Gender of Respondents

	Number	Percentage
Male	184	46%
Female	216	54%
Total	400	100%

Table 2: Age of Respondents

	Number	Percentage
16 -24	42	11 %
25 - 44	165	41 %
45 -54	110	28 %
55 -65	83	21 %
Total	400	100%

Table 3: Urban/Rural composition of Respondents

	Number	Percentage
Urban	130	32.5 %
Rural	270	67.5 %
Total	400	100%

B.1 Are you aware that GPL has changed the presentation of the bill format in 2010?

	Number	Percentage
Yes	336	84%
No	64	16%
Total	400	100%

B.2 Are you aware that you have both an account number and a customer number in your current GPL bill?

	Number	Percentage
Yes	246	62%
No	154	38%
Total	400	100%

B.3 What does the customer number on the GPL bill represents?

	Number	Percentage
Know	126	31%
Don't Know	274	69%
Total	400	100%

B.4 How many days after the bill date does the GPL bill becomes due?

	Number	Percentage
Know	101	25%
Don't Know	299	75%
Total	400	100%

B.5 If your GPL bill has an “adjustment”, what could it represent?

	Number	Percentage
Know	149	37%
Don't Know	251	63%
Total	400	100%

B.6 If you don't receive a GPL bill in January 2011 would you still go and make a payment to GPL?

	Number	Percentage
Yes	264	66%
No	136	34%
Total	400	100%

B.7 Do you normally receive your bill before the due date?

	Number	Percentage
Yes	354	89%
No	46	11%
Total	400	100%

B.8 How long before the due date do you usually receive your GPL bill?

	Number	Percentage
2 weeks or more before the due date	44	12%
1 week to less than 2 weeks before the due date	201	57%
Less than 1 week before the due date	109	31%
Total	354	100%

B.9 If GPL had an automated Bill Inquiry system that you could access by telephone, would you use it to get your bill information?

	Number	Percentage
Yes	288	72%
No	112	28%
Total	400	100%

B.10 If you could get your bill information online using the internet (GPL website), would you use this system to get your bill information?

	Number	Percentage
Yes	208	52%
No	192	48%
Total	400	100%

B.11 What is the current cost per kilowatt hour?

	Number	Percentage
Know	129	32%
Don't Know	271	68%
Total	400	100%

Appendix B *GPL Customer Surveys Sample Design*

For each survey, a sample size of 400 would be used as required by GPL (and recommended by previous studies undertaken by PPA – to get a level of confidence of 95% and a precision of the results of about 5%).

As recommended by PPA in its report - Section 9.3.5 page 45, a two stage sampling design would be used with coastal areas of Guyana stratified by location (GPL area), a number of GPL areas would be randomly selected from a list of GPL areas and then a sample (select with randomisation) from each selected area chosen.

Information from GPL Database

Below are the number of GPL customers, and percentages by Tariff.

ALL CUSTOMERS									
	Tariff A		Tariff B		Tariff C		Tariff D		Total
Region 4 excluding Gt	42,921	32%	2,863	23%	73	21%	91	22%	
Region 3	21,228	16%	1,270	10%	23	7%	14	3%	
Region 7	1,669	1%	426	3%	3	1%	0	0%	
Region 2	9,537	7%	1,007	8%	9	3%	20	5%	
Region 5	9,528	7%	678	6%	14	4%	11	3%	
Region 6	26,259	19%	1,619	13%	34	10%	25	6%	
No name	0	0%	23	0%	5	1%	11	3%	
Coordinator Total	135,848	100%	12,215	100%	349	100%	407	100%	148,855
GPL Total	135,884	100%	12,215	100%	349	100%	407	100%	148,855

There are 135,884 (or 91.3%) Tariff A customers, 12,215 (or 8.2%) Tariff B customers, 349 (or 0.2%) Tariff C customers and 407 (or 0.3%) Tariff D customers. From this, the sample size per Tariff would be as given in line 3 below for a 400 sample. However, one customer from Tariff C and one from Tariff D is not feasible so oversampling of these tariffs were done, as given in line 4 below.

	Tariff A	Tariff B	Tariff C	Tariff D	Total
GPL Total	135,884	12,215	349	407	148,855
% of Overall Total	91.3%	8.2%	0.2%	0.3%	100%
Sample -400 customers	365	33	1	1	400
Suggested sample	345	33	10	12	400

Sampling with probability proportional to size (pps) – the larger the geographic area the bigger the sample – would be done, a systematic pps sampling with geographic arrangement of the sampling frame would be done to achieve implicit stratification.

A two stage sampling design would be used with coastal areas of Guyana (Regions 2, 3, 4, 5, 6 and 7) stratified by location (GPL area), a number of GPL areas would be randomly selected as outlined above from a list of GPL areas and then a sample (select with randomisation) from each selected area chosen. A list of areas selected by the Team Leader is submitted to GPL for perusal and approval.

There are 71 GPL areas (area 10 to area 80) with similar number of Tariff A customers in each. A random number was selected between 1 and 4 using Microsoft Excel and 3 was chosen, thus area 3 (corresponding to GPL area 12) was the first area selected and then systematically every 4th area thereafter:

12, $12 + 4 = 16^{\text{th}}$ area, $16 + 4 = 20^{\text{th}}$ area, ... , $75 + 4 = 79^{\text{th}}$ area.

Thus 19 areas were selected in the first stage of sampling as given on the next page. This information is being used to select a representative sample using smaller areas that interviewers could enumerate.

Using the tariff totals and adjusting because we need to enumerate Bartica (sample size 11) and Leguan (sample size 9) which were not selected in the sample, the sample sizes were obtained and the regional proportions in the sample (next page) is the same as regional totals in the population (GPL database of tariff A customers), given in table overleaf:

Percentage by regions	Tariff A	%
Regions 2, 3	30,765	23%
Region 4	67,663	50%
Regions 5,6	35,787	26%
Region 7	1,669	1%
Total	135,884	100%

Description of areas selected in sample (Tariff A – Residential Customers)	Sample Size
BOURDA,LACYTOWN,ROBBSTOWN,NEWTOWN	10
LA PENITENCE,LAING AVENUE,CASTELLO H/SCHEME	10
SOUTH R/VELDT PARK	13
C/VILLE,BLYGEZIGHT,BEL AIR GDNS.,BEL AIR SPRINGS, PRASHAD NAGAR,LAMAHA GARDENS	34
CRAIG, FRIENDSHIP, SOESDYKE	30
SUCCESS,CHATEAU MARGOT,LA BONNE INTENTION,VRYHEID'S	31

LUSTH/SCHEME,BETERVERWAGTING,TRIUMPH	
HASLINGTON,GOLDEN GROVE,NABACLIS,COVE&JOHN,CRAIG MILL,VICTORIA,BELFIELD,NOOT-EN-ZUIL, LOWLANDS, HOPE DOUCHFOUR,TWO FRIENDS,ANN'S GROVE	27
GOED INTENT TO PLANTATION VRIESLAND	18
GOOD SUCCESS, SANS SOUCI,BELLE PLAINE,SARAH,FRIENDSHIP,ZEELANDIA,ARTHURVILLE,MARIA JOHANNA	15
CHARITY,POMEROON,NEW ROAD,SOMERSET&BERKS,MARIA'S DELIGHT,ANDREWS,BETTER SUCCESS,WESTBURG,DARTMOUTH,WALTON HALL,DEVONSHIRE CASTLE,HAMPTON COURT	26
MARIA'S LODGE,SUDDIE,ONDERNEEMING,ADVENTURE,AIRY HALL,RIVERTOWN,POMONA,HUIST DIEREN,MIDDLESEX,VILVORDEN,FAIRFIELD,DRYSHORE,AURORA,GOOD INTENT,GOOD HOPE,SUPENAAM	22
ROSIGNOL,SHIELDSTOWN,BLAIRMONT,ITACA VILLAGE	17
STRAND-LAD LANE TO PHILADELPHIA STREET/SANDFOORT	15
#7 VILLAGE TO #23 VILLAGE,COURTLAND, FYRISH, KILCOY, ALBION, SAND REEF, CHESNEY/ KILCOY SOUTH, CHESNEY/KILROY NORTH	20
PORTUGESE QUART.,PORT MOURANT,ANKERVILLE,RESOURCE	10
#41 TO #43 VILLAGE,#44 TO #50 VILLAGE,#51 TO #57 VILLAGE	14
#79 VILLAGE,SKELDON,GANGARAM	15
LEGUAN	9
BARTICA	11
Total sample size	345

Each team of Supervisor and interviewers will receive a list of GPL areas to be visited and instructions on obtaining the sample from each selected area. A systematic random sample of houses (residential customers) from each selected area would be done and persons age 16 to 65 in seven regions (2, 3, 4, 5, 6 and 7) thus selected will be interviewed. A separate sample from each selected area would be taken of the other categories of GPL customers – commercial (Tariff B and Tariff C) and industrial customers (Tariff D). Two Supervisors and nine Interviewers will participate in the data collection.

Tariff B, C and D Customers

Below is the regional breakdown of Tariff B, C and D Customers, the no name data was not included in this table so there is a slight difference in totals. The regional sample distribution is given below.

Percentage by regions	Tariff A	%	Tariff B	%	Tariff C	%	Tariff D	%
Regions 2, 3	30,765	23%	2,277	19%	32	9%	34	9%
Region 4	67,663	50%	7,192	59%	261	76%	326	82%
Regions 5,6	35,787	26%	2,297	19%	48	14%	36	9%
Region 7	1,669	1%	426	3%	3	1%	0	0%
Total	135,884	100%	12,192	100%	344	100%	396	100%

From the GPL database, Tariff C and D customers will be selected at random on a geographic basis (regional basis). Interviewers would be given samples of Tariff B customers and would select samples as suggested by the Survey Coordinator.

Table below give number of Tariff B, C and D Customers by region in the sample (including “Georgetown” and “Region 4 excluding Georgetown”).

Sample (Tariff B, C, D) by regions	Tariff B	Sample	Tariff C	Sample	Tariff D	Sample
Regions 2, 3	2,277	6	32	1	34	1
Region 4	7,192	20	261	8	326	10
Georgetown	4,329	12	188	6	235	7
Region 4 excluding Georgetown	2,863	8	73	2	91	3
Regions 5,6	2,297	6	48	1	36	1
Region 7	426	1	3	0	0	0
Total	12,192	33	344	10	396	12

Appendix C Questionnaire

GPL BILL Questionnaire No. _____

Interviewer _____ Date _____

Supervisor _____ Date _____

Data Entry _____ Date _____

Hello Customer

I am carrying out a survey for GPL. Electricity is provided to you by GPL and the company wants to know more about whether customers have a good understanding of their monthly bill and any other bill related issues. You have been randomly selected to help us with this and we would be grateful for your assistance. Your responses will be confidential and not communicated to the company. Could you please answer the following questions?

Section A (Demographics) - Do NOT Ask – Use Customer Satisfaction Survey Responses

A.1 **Respondent's Initials** _____

A.2 **Respondent's Address** _____

A.3 (Do not ask) **GPL Area No.** _____ Urban1 Rural2

A.4 (Do not ask) **Region** _____

A.5. (Do not Ask) **Gender** Male 1 Female2

A.6. **Type of Respondent** Residential...1 Commercial2 Industrial3

A.7. **What was your age last birthday?**
 16 – 24 ...1 25 – 44...2 45 – 54 ...3 55 – 65 ...4

SECTION B (GPL BILL)

B.1 Are you aware that GPL has changed the presentation of the bill format in 2010?

Yes1 No2

B.2 Are you aware that you have both an account number and a customer number in your current GPL bill?

Yes1 No2

B.3 What does the customer number on the GPL bill represents?

Know1 Don't know2

B.4 How many days after the bill date does the GPL bill becomes due?

Know1 Don't know2

B.5 If your GPL bill has an "adjustment", what could it represent?

Know1 Don't know2

B.6 If you don't receive a GPL bill in January 2011 would you still go and make a payment to GPL?

Yes1 No2

B.7 Do you normally receive your bill before the due date?

Yes1 No2

If the answer to Q.B.7 is yes, go to Q.B.8, if the answer to Q.B7 is No go to Q.B.9

B.8 How long before the due date do you usually receive your GPL bill?

- 2 weeks or more before the due date1
- 1 week to less than 2 weeks before the due date2
- Less than 1 week before the due date3

B.9 If GPL had an automated Bill Inquiry system that you could access by telephone, would you use it to get your bill information?

- Yes1
- No2

What is the reason for your answer?

B.10 If you could get your bill information online using the internet (GPL website), would you use this system to get your bill information?

- Yes1
- No2

What is the reason for your answer?

B.11 What is the current cost per kilowatt hour?

- Know1
- Don't know2

B.12 How could the current GPL bill format be improved?

The Survey Coordinator would like to contact some of the respondents to find out how well the interview was done. Could you tell me your phone number:

Phone Number _____

*****Thank you for taking the time to answer these questions.*****

Appendix D: Training Manual

2011 GPL Customer Survey

Training Manual

January 2011

INSTRUCTIONS FOR INTERVIEWERS

HOW TO HANDLE AN INTERVIEW

Conduct yourself in a relaxed informal way, but be thorough. Use the questionnaire carefully.

- Ensure that you understand the exact purpose of each question. This will help you to know if the responses you are receiving are adequate.
- Ask the questions exactly as they are written. Even small changes in wording can alter the meaning of a question.
- Ask the questions in the same order as they are given on the questionnaire.
- Ask all the questions, (unless there is a skip pattern) even if the respondent answers two questions at once. You can explain that you must ask each question individually, or say “Just so that I am sure...” or “Just to refresh my memory...”, and then ask the question.
- Help your respondents to feel comfortable, but make sure you do not suggest answers to your questions.
- Do not leave a question unanswered unless you have been instructed to skip the question. Questions left blank are difficult to deal with later. In the office it may look as though you forgot to ask the question. Always write in 0 when a zero answer is given.
- Record answers immediately. Check the whole questionnaire before you leave the household to be sure it is completed correctly.
- Thank the respondent for his (or her) cooperation. Remember the survey schedule and do not stay and talk for too long. Do **not** ask personal questions e.g. person's marital status etc.

General Points

- *Dress neatly.*
- *Gain rapport with the respondent.*
- *Probe for adequate responses.*

GPL Bill Survey

Go to *GPL Bill Survey Questionnaire*. Do **Not** fill page 1 of GPL Call Centre Survey at time of interview, complete this page in the evenings at home.

Read introduction (Hello Customer ... following questions) to respondent before start of interview for GPL Call Centre Questionnaire.

Section B (GPL Bill)

- B.1 GPL has a new Customer Information System, this has resulted in a new bill format in 2010. Ask question and circle appropriate response.
- B.2 Familiarize yourself with the new GPL Bill. On the new bill there is both an account number and customer. Please be aware this question do not have a “right” or “wrong” answer, we are seeking to find out what the customer knows. Ask question (without prompting for a particular answer) and circle appropriate response.
- B.3 Ask question (without prompting for a particular answer) and circle appropriate response. Code the questionnaire in the evening, not during the interview or during the day.

Coding

Customer number - The number is unique to the customer which he/ she would retain regardless of account location. E.g Customer with number 0023456 can have two accounts 0856823 and 0246712 at two different locations (Berbice and Essequibo).

- B.4 The “bill date” represents date GPL has billed the customer e.g. 12th January, 2011. The “due date” is the date payment has to be made after which customer may be disconnected for nonpayment of bill. Please be aware this question do not have a “right” or “wrong” answer, we are seeking to find out what the customer knows. Ask question (without prompting for a particular answer) and circle appropriate response. Code the questionnaire in the evening, not during the interview or during the day.

Coding

Due date is Twenty –One days after the Bill Date which is printed on the Bill. Both Due Date and Bill Date are printed on the bill.

- B.5 Please be aware this question do not have a “right” or “wrong” answer, we are seeking to find out what the customer knows. Ask question (without prompting for a particular answer) and circle appropriate response. Code the questionnaire in the evening, not during the interview or during the day.

Coding

An Adjustment would normally represent a correction to an account which would in most cases represent an adjustment to previous consumption as a result of an erroneous or estimated reading.

- B.6 Ask question and circle appropriate response.
- B.7 Ask question and circle appropriate response. This question has a skip pattern, if Yes go to B.8; If No skip question B.8 ask question B.9.
- B.8 **Only ask this question if answer was Yes to B.7.** Ask question (do not give responses) and circle appropriate response.
- B.9 The proposed GPL automated Bill Inquiry system that you could access by telephone is a system where a customer can phone a number, state give their GPL account number and receive the updated GPL Bill information e.g. amount due etc. This system is for obtaining GPL bill information only and not for making a payment, customer would still receive monthly GPL bill. Ask question (ensure respondent understand question) and circle appropriate response.
- Obtain reason for answer from respondent.
- B.10 The proposed system of obtaining information online using the internet (GPL website), a customer goes to the GPL website, use their given password (on GPL bill) type their GPL account number and receive the updated GPL Bill information e.g. amount due etc. This system is for obtaining GPL bill information only and not for making a payment, customer would still receive monthly GPL bill. Ask question (ensure respondent understand question) and circle appropriate response.
- Obtain reason for answer from respondent.
- B.11 Ask question (without prompting for a particular answer) and circle appropriate response. Code the questionnaire in the evening, not during the interview or during the day.

Coding

Residential: \$48.42 (75kwh or less)

\$53.78 (over 75kwh)

B.12 Listen to response, summarize and write answer on one line.

Ask respondent for his/her phone number (if possible cell number), explain Survey Coordinator would like to contact some of the respondents to find out how well the interview was done.

Tell respondent "Thank you for taking the time to answer these questions", without too much delay go to next selected house to commence the next interview.

Appendix E **List of Personnel involved in the survey**

Principal

Raymond Latchmansingh

Survey Coordinator/Team Leader

C. Rajcoomar Narine

Enumerators

Yunika Baird

Farouk Baksh

Latecia John

Dwayne Loncke

Demallea Perrier

Eugene Perrier

Narain Ramjit

Parasram Sookdeo

Lester Valentine

Data Entry

Teina Narine

GPL Managerial Staff

Renford Homer

Administrative Support

Berlinda Persaud

Nadia Persaud