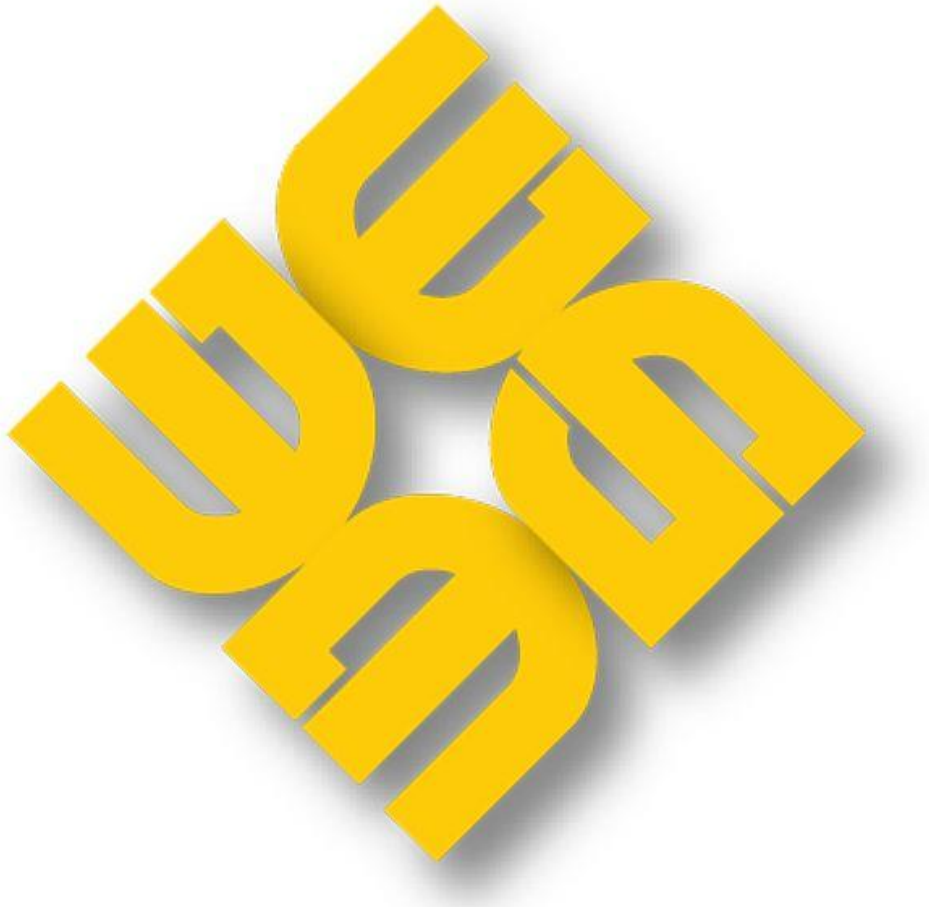
MAG-RMAR-2019-01

QUARTERLY RETAIL MARKET ASSESSMENT REPORT

26 December 2018 – 25 March 2019



PHILIPPINE ELECTRICITY MARKET CORPORATION

MARKET ASSESSMENT GROUP (MAG)

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Table of Contents

List of Figures

List of Tables

Executive Summary

This Quarterly Assessment Report on the Retail Electricity Market covers the billing period **26 December 2018 to 25 March 2019.** As of 25 March 2019, there were a total of 1,240 registered Contestable Customers (from previous quarter's 1,198 registered Contestable Customers). Likewise, the market recorded a total of 31 registered Retail Electricity Suppliers (RES), 14 registered Local RES (LRES), and 24 registered Supplier of Last Resort (SOLR).

Majority or 1,119 registered Contestable Customers were in Luzon and the remaining 121 registered Contestable Customers were in Visayas. Of the total registrants, 19 percent were in the 750 kW to 999 kW contestability threshold, while 81 percent were in the 1 MW and above contestability threshold. Furthermore, 601 registrants were engaged into industrial activities while 639 registrants were into commercial activities. It may be noted that retail activities of Contestable Customers were almost equally divided between industrial and commercial all throughout the period in review. The total registrants was about 66 percent of the 1,884 electricity end-users already issued a Certificate of Contestability by the ERC. The remaining 34 percent electricity end-users already issued with Certificate of Contestability have not yet registered in the market.

The total energy consumption of the registered Contestable Customers for the first quarter of 2019 stood at about 4,477 GWh. This consumption level accounts for about 24 percent of the combined energy consumption of the registered Contestable Customers and the Captive Customers for the quarter. The load factor of registered Contestable Customers was maintained relatively high ranging from 77 to 82 percent throughout the period in review, indicating that their electricity usage was reasonably efficient. By the end of March 2019 billing month, the load factor stood at 81 percent coming from 78 percent in December 2018.

Majority of the registered Contestable Customers were located within the MERALCO franchise area. By the end of March 2019 billing month, about 34 percent of all registrants were being supplied by the suppliers under the MERALCO group. This was followed by Aboitiz group at 22 percent share, San Miguel group at 19 percent share, Ayala group at 9 percent share, and PHENRES (formerly TAORES) at 3 percent share. The level of market concentration based on Herfindahl-Hirschman Index (HHI) using the ERC's major participant grouping fell within the concentrated area both in consumption and number of registered Contestable Customers.

Fifty-eight (58) switches from one Supplier to another were recorded during the period in review. Thirty-eight (38) of the switches were from Retail Electricity Supplier to Retail Electricity Supplier, while the remaining twenty (20) were from Retail Electricity Supplier to Local Retail Electricity Supplier.

This Quarterly Assessment Report on the Retail Electricity Market discusses the results of monitoring indices, as set forth in the Catalogue of Retail Market Monitoring Data and Indices. This report also provides indications on how the retail market performed during the quarter in review and how it fared with the performance of the retail market in the previous comparable periods. It is important to note that the Contestable Customers being referred to in this report were only those registered in the market. Other electricity end-users that have been issued with a Certificate of Contestability by the Energy Regulatory Commission (ERC) but have yet to register in the market remain as Captive Customers.

I. MARKET STRUCTURE

The market structure indices were used to determine the number of players, market share, and level of market concentration.

A. Number of Players

1. Number of Contestable Customers

The number of registered Contestable Customers grew from 1,002 Contestable Customers in March 2018, to 1,240 registrants by the end of the March 2019 billing period (**Figure 1)**. This was around 66 percent of the 1,884 qualified electricity end-users already issued with a certificate of contestability, based on the latest data of the Energy Regulatory Commission (ERC) [1]. This period marked a 4 percent increase from the previous quarter's 1,198 registrants, and a significant 24 percent increase from the same period of last year's 1,002 registrants.

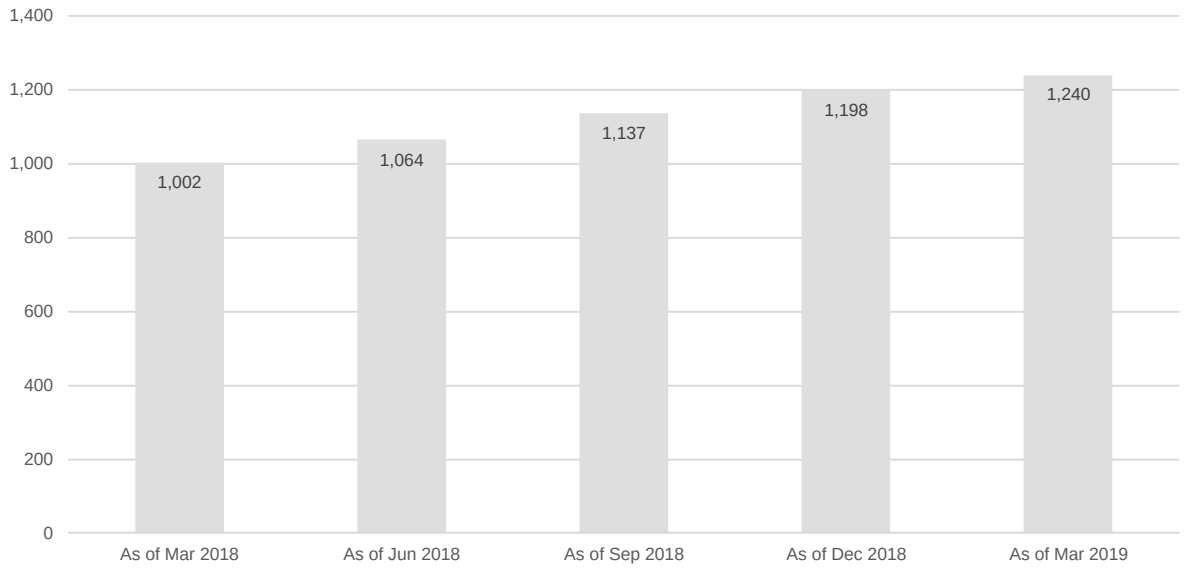

Figure 1. Cumulative Number of CCs, Mar 2018 to Mar 2019

[1] Monthly Statistical Data as of March 2019 (Source: ERC's Competitive Retail Electricity Market (CREM) Report; Link: www.buyourelectricity.com.ph).

Figure 2 shows the cumulative number of registrants per contestability threshold by the end of each relevant quarter. By the end of the March 2019 billing period, the market recorded 240 registrants in the 750-999 kW contestability threshold. This was about 19 percent of all the Contestable Customers registered in the market. The remaining 1,000 or about 81 percent was classified under 1 MW & above contestability threshold.

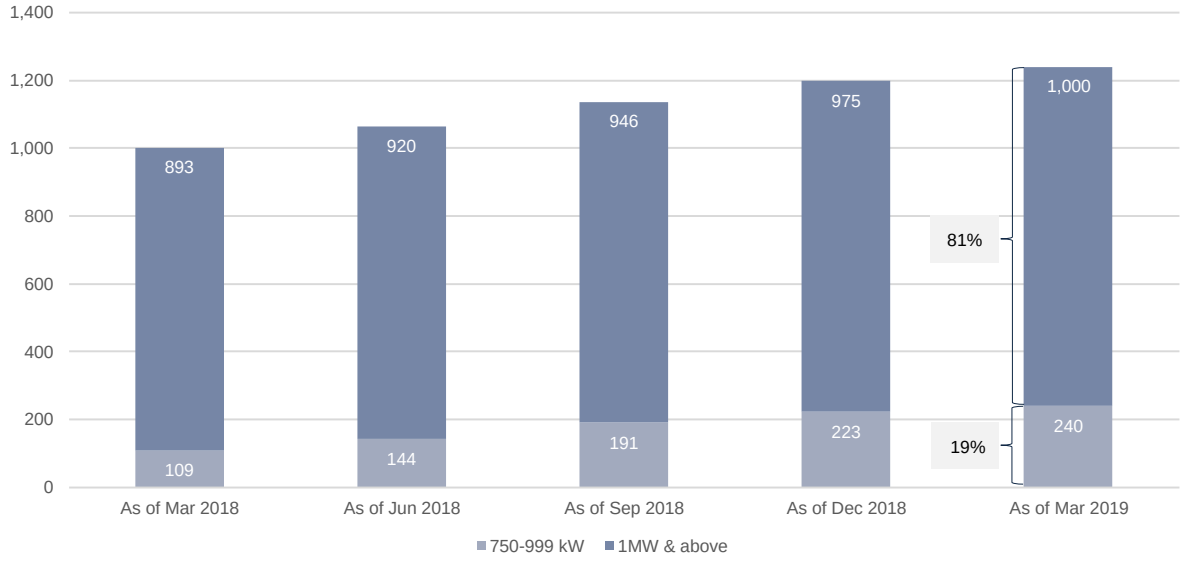

Figure 2. Cumulative Number of CCs Per Contestability Threshold, Mar 2018 to Mar 2019

In terms of distribution by region, majority of Contestable Customers or about 90 percent (1,119 Contestable Customers) were located in Luzon while about 10 percent (121 Contestable Customers) were located in Visayas. The number of registered Contestable Customers per region by the end of each relevant quarter are shown in **Figure 3.**

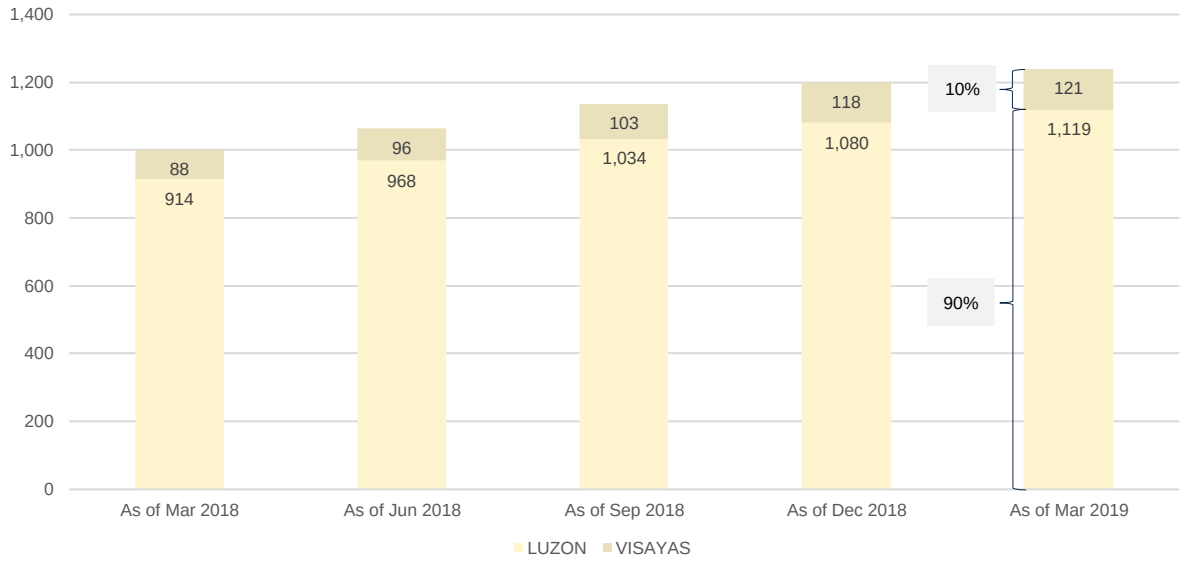

Figure 3. Cumulative Number of CCs Per Region, Mar 2018 to Mar 2019

Figure 4 shows the cumulative number registered Contestable Customers per type of retail activity by the end of each relevant quarter. As of March 2019 billing period, the market was comprised of 601 Contestable Customers (about 48 percent) that were engaged into industrial activities and 639 Contestable Customers (about 52 percent) that were into commercial activities. It may be noted that retail activities of Contestable Customers were almost equally divided between industrial and commercial all throughout the period in review.

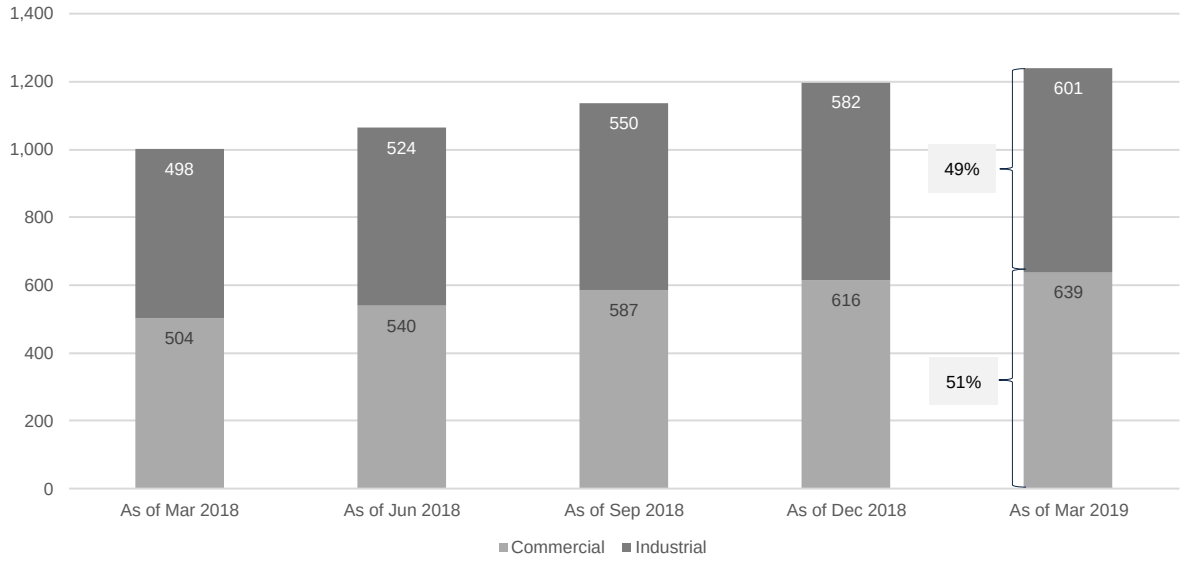

Figure 4. Cumulative Number of CCs Per Retail Activity, Mar 2018 to Mar 2019

Table 1 shows the percentage of registered Contestable Customers per level of maximum energy consumption based on their metered quantity (MQ). From

January to March 2019 billing months, majority or about 52 percent of the registrants had maximum energy consumption higher than 1 MWh up to 5 MWh. Meanwhile, about 17 percent of the registered Contestable Customers had maximum energy consumption of above 5 MWh up to 10 MWh, while 12 percent had maximum energy consumption higher than 20 MWh up to 50 MWh during the period.

Table 1. Percentage of CCs Per Level of Maximum Energy Consumption, 2019-Q1

Region	1 MWh and below	Above 1 MWh to 5 MWh	Above 5 MWh to 10 MWh	Above 10 MWh to 15 MWh	Above 15 MWh to 20 MWh	Above 20 MWh to 50 MWh	Above 50 MWh	Sub-Total Per Region
LUZON	6.31%	46.70%	16.04%	6.26%	3.35%	10.25%	0.00%	88.91%
VISAYAS	0.53%	5.07%	0.99%	0.35%	0.51%	2.02%	1.62%	11.09%
Sub-Total Per Level of Maximum Energy Consumption	6.84%	51.77%	17.03%	6.61%	3.86%	12.27%	1.62%	100.00%

2. Number of Suppliers

Effective 04 March 2019, MeridianX Inc. (MERXRES) started participating in the market as Retail Electricity Supplier, thus by the end of the March 2019 billing month, the total number of Suppliers increased to 69, from previous quarter's 68 registered Suppliers. **Table 2** shows the cumulative number of registered Suppliers per category vis-à-vis the number of active Suppliers or those that were currently serving a registered Contestable Customer. As of the period, majority of the Retail Electricity Suppliers were actively participating in the market and serving registered Contestable Customers.

Table 2. Summary of Active Suppliers Per Category, as of 25 March 2019

Category	No. of Suppliers	
	Total Registered	**With CCs Served**
Retail Electricity Supplier	31	28
Local Retail Electricity Supplier	14	3
Supplier of Last Resort	24	0
Total	**69**	**31**

A list of all registered Suppliers per category (Retail Electricity Supplier, Local Retail Electricity Supplier, and Supplier of Last Resort) as of the March 2019 billing period is provided in **Table 3**.

Table 3. List of Suppliers Per Category, as of 25 March 2019

Category	No.	Market Participant Name	Short Name
Retail Electricity Supplier	31	Aboitiz Energy Solutions, Inc.	AESIRES
		AC Energy Holdings, Inc.	ACERES
		AdventEnergy, Inc.	ADVENTRES
		Anda Power Corporation RES	ANDARES
		Bac-Man Geothermal, Inc.	BGIRES
		Citicore Energy Solutions, Inc.	CESIRES
		Corenergy, Inc.	CORERES
		DirectPower Services, Inc.	DIRPOWRES
		Ecozone Power Management, Inc.	EPMIRES
		FDC Retail Electricity Sales Corporation	FDCRESC
		First Gen Energy Solutions, Inc.	FGESRES
		Global Energy Supply Corporation	GESCRES
		GNPower Ltd. Co.	GNPLCRES
		KEPCO SPC Power Corporation	KSPCRES
		Kratos RES, Inc.	KRATOSRES
		Manta Energy, Inc.	MANTARES
		Masinloc Power Partners Company Limited	MPPCLRES
		Mazzaraty Energy Corporation	MACRES
		MeridianX Inc.	MERXRES
		Millennium Power RES, Inc.	MPRIRES
		PHINMA Energy Corporation-RES	PHENRES
		Premier Energy Resources Corporation	PERCRES
		Prism Energy, Inc.	PRISMRES
		San Miguel Electric Corporation	SMELCRES
		SEM-Calaca RES Corporation	SCRCRES
		SMC Consolidated Power Corporation	SMCCPCRES
		SN Aboitiz Power-RES, Inc.	SNAPRES
		Solvre, Inc.	SOLVRERES
		TeaM (Philippines) Energy Corporation	TPECRES
		Vantage Energy Solutions and Management, Inc.	VESMIRES
		Waterfront Mactan Casino Hotel, Inc.	WAHCRES
Local Retail Electricity Supplier	14	Batangas II Electric Cooperative, Inc.	BTLC2LRE
		Camarines Sur II Electric Cooperative, Inc.	CASUR2LRE
		Cebu I Electric Cooperative, Inc.	CEBEC1LRE
		Cebu II Electric Cooperative, Inc.	CEBEC2LRE
		Central Negros Electric Cooperative, Inc.	CENECOLRE
		Clark Electric Distribution Corporation LRES	CEDCLRE
		Dagupan Electric Corporation	DECORPLRE
		Ilocos Norte Electric Cooperative, Inc.	INECLRE
		Mactan Enerzone Corporation LRES	MEZLRE
		Manila Electric Company	MRLCOLRE
		San Fernando Electric Light & Power Co., Inc.	SFELAPLRE
		Subic Enerzone Corporation	SEZLRE
		Tarlac Electric, Inc.	TEILRE
		Visayan Electric Company, Inc.	VECOLRE
Supplier of Last Resort	24	Angeles Electric Corporation	AECSLR
		Balamban Enerzone Corporation	BEZSLR
		Batangas II Electric Cooperative, Inc.	BTLC2SLR
		Benguet Electric Cooperative, Inc.	BENECOSLR
		Bohol I Electric Cooperative, Inc.	BOHECO1SLR
		Bohol Light Company, Inc.	BLCISLR
		Cabanatuan Electric Corporation	CELCORSLR
		Camarines Sur II Electric Cooperative, Inc.	CASUR2SLR
		Cebu I Electric Cooperative, Inc.	CEBEC1SLR
		Cebu II Electric Cooperative, Inc.	CEBEC2SLR
		Clark Electric Distribution Corporation	CEDCSLR
		Dagupan Electric Corporation	DECORPSLR
		Ilocos Norte Electric Cooperative, Inc.	INECSLR
		Ilocos Sur Electric Cooperative, Inc.	ISECOSLR
		Isabela I Electric Cooperative, Inc.	ISLCO1SLR
		La Union Electric Cooperative, Inc.	LUELCOSLR
		Mactan Electric Company, Inc.	MECOSLR
		Mactan Enerzone Corporation	MEZSLR
		Manila Electric Company	MRLCOSLR
		Negros Oriental II Electric Cooperative, Inc.	NRECO2SLR
		Subic Enerzone Corporation	SEZSLR
		Tarlac I Electric Cooperative, Inc	TRLCO1SLR
		Tarlac II Electric Cooperative, Inc	TRLCO2SLR
		Visayan Electric Company, Inc.	VECOSLR

B. Market Share

1. Market Share of Supplier

The Suppliers generally increased the number of their registered Contestable Customer. **Table 4** shows the cumulative number of registered Contestable Customers served by each Supplier at the end of each relevant quarter. The Suppliers were grouped based on the ERC's major participant grouping[2] which reflects the affiliation among the Suppliers.

On top of the list was MRLCOLRE with 386 registered Contestable Customers as of the end of the March 2019 billing period. Next in the list were AESIRES with 172 Contestable Customers, SMELCRES with 110 Contestable Customers, and ADVENTRES with 72 Contestable Customers, and ACERES with 71 Contestable Customers.

Table 4. Cumulative Number of CCs Per Supplier, Mar 2018 to Mar 2019

Market Participant Group	As of Mar 2018	As of Jun 2018	As of Sep 2018	As of Dec 2018	As of Mar 2019
Aboitiz Group	**268**	**279**	**288**	**306**	**316**
ADVENTRES	*78*	*78*	*77*	*77*	*72*
AESIRES	*150*	*152*	*155*	*159*	*172*
MACRES	*2*	*2*	*3*	*3*	*4*
PRISMRES	*18*	*23*	*25*	*37*	*39*
SEZLRE	*1*				
SFELAPLRE	*1*	*1*	*1*	*1*	*1*
SNAPRES	*18*	*23*	*27*	*29*	*28*
Ayala Group	**131**	**141**	**149**	**154**	**155**
ACERES	*57*	*64*	*69*	*72*	*71*
DIRPOWRES	*36*	*37*	*37*	*38*	*40*
EPMIRES	*38*	*40*	*43*	*44*	*44*
MERALCO Group	**317**	**338**	**365**	**390**	**433**
CEDCLRE	*4*	*6*	*6*	*6*	*6*
MRLCOLRE	*295*	*309*	*331*	*353*	*386*
MRLCOSLR					
VESMIRES	*18*	*23*	*28*	*31*	*41*
PHENRES	**67**	**69**	**77**	**74**	**40**
PHENRES	67	*69*	*77*	*74*	*40*
San Miguel Group	**95**	**102**	**115**	**121**	**140**
SMCCPCRES	*6*	*6*	*9*	*10*	*30*
SMELCRES	*89*	*96*	*106*	*111*	*110*
Others	**121**	**131**	**139**	**149**	**152**
ANDARES		*1*	*1*	*1*	*2*
BGIRES	*17*	*20*	*21*	*24*	*43*
CESIRES	*1*	*2*	*2*	*2*	*2*
CORERES	*1*	*1*	*2*	*2*	*2*
FDCRESC	*9*	*10*	*11*	*12*	*12*
FGESRES	*26*	*26*	*27*	*28*	*13*
GESCRES	*16*	*16*	*15*	*16*	*14*
GNPLCRES	*4*	*4*	*4*	*4*	*4*
KRATOSRES	*9*	*12*	*16*	*17*	*19*
KSPCRES	*1*	*2*	*3*	*3*	*3*
MANTARES	*2*	*2*	*2*	*2*	*2*
MPPCLRES	*3*	*3*	*3*	*6*	*6*
PERCRES	*12*	*12*	*12*	*12*	*12*
SCRCRES				*1*	*1*
TEILRE					
TPECRES	*19*	*19*	*19*	*18*	*16*
VECOLRE					
WAHCRES	*1*	*1*	*1*	*1*	*1*
TOTAL	**999**	**1,060**	**1,133**	**1,194**	**1,236**

[2] Major participant grouping is based on ERC's Competitive Retail Electricity Market (CREM) Report.

The figures below show the share of Suppliers in terms of number of registered Contestable Customers and their corresponding energy consumption, per the ERC's major participant grouping.

Figure 5 shows the quarterly share of the Suppliers per major participant, in terms of the number of Contestable Customers registered in the market as of the March 2019 billing period.

Similar with the previous quarters, the top on the list was the MERALCO group with about 35 percent share, followed by the Aboitiz group at about 26 percent share. Meanwhile, the Ayala group's share stood at about 13 percent, the San Miguel group at about 11 percent share and PHENRES at about 3 percent by the end of the March 2019 billing month. The remaining 12 percent was accounted for the share of the other registered Suppliers that were not affiliated with the major participant groups.

Over the years, a significant drop in the MERALCO group's share was observed at about 63 percent from the start of RCOA implementation in July 2013 billing month, to about 32 percent share by the end of the March 2018 billing month. It may be noted that its share started to slightly increase in 2018 that by the end of March 2019 billing month, the MERALCO group's share in terms of number of registered Contestable Customers served, was recorded at about 35 percent.

The Aboitiz group and Ayala group maintained their shares at about 26 percent and 13 percent, respectively.

Meanwhile, the San Miguel group showed slight increase in their share in terms of number of registered Contestable Customers served relative to its shares during the previous quarter and same period of the previous year.

On the other hand, PHENRES showed significant decrease in their share in terms of number of registered Customers served, from 6 - 7 percent to 3 percent by the end of March 2019 billing month.

The observed changes in the shares of participants were driven by several factors including among others, the participation of new Suppliers, the registration of new Contestable Customers and their choice of Supplier, and the switching of already registered Contestable Customers from one Supplier to another.

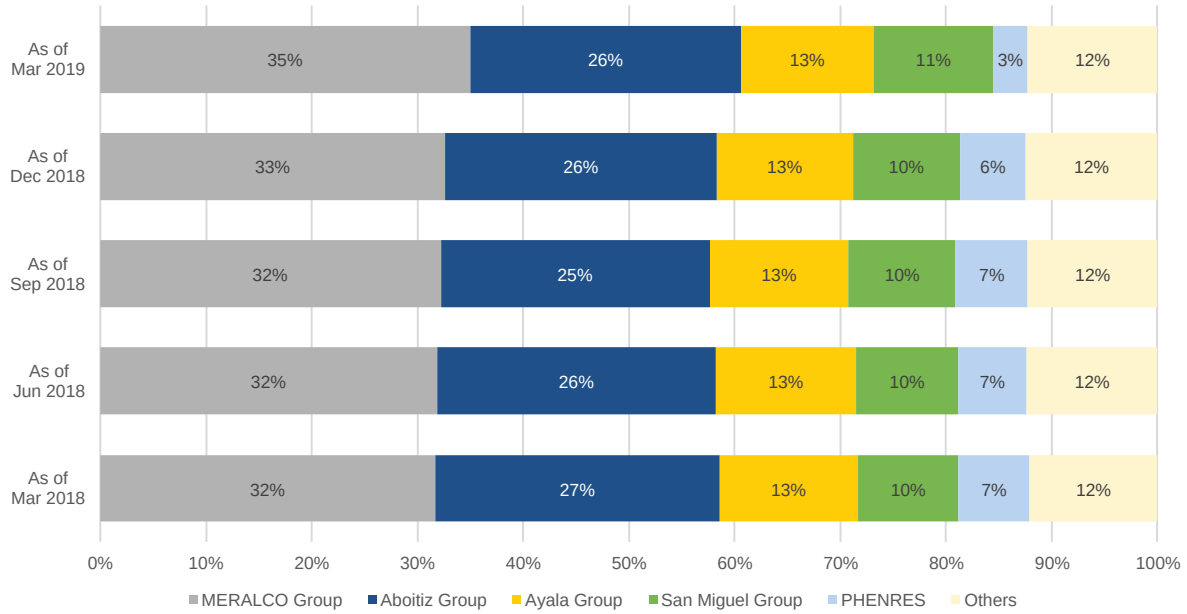

Figure 5. Share in Number of CCs Per Major Participant, Mar 2018 to Mar 2019

Consistent with the discussion above, the MERALCO group had the largest share in terms of registered Contestable Customer consumption for all the quarters in review as seen in **Figure 6**. The MERALCO group recorded a 34 percent share. This was higher than the 31 percent share it had during the previous quarter and same period of the previous year.

The Aboitiz group followed the MERALCO group in terms of share in the consumption of registered Contestable Customers. For the first quarter of 2019, the share of the Aboitiz group decreased to about 22 percent. This was lower than the 24 percent share it had during the previous quarter and the 25 percent share it had during the same period of the previous year.

Meanwhile, the San Miguel group had about 19 percent share, which was higher than the 17 percent share it had during the previous quarter and same period of the previous year. The Ayala group maintained its 9 percent share, while PHENRES (formerly TAORES) recorded about 3 percent share during the first quarter of 2019. This was slightly lower than 4 percent share it had during the previous quarter, and 5 percent share it had during the same period of the previous year.

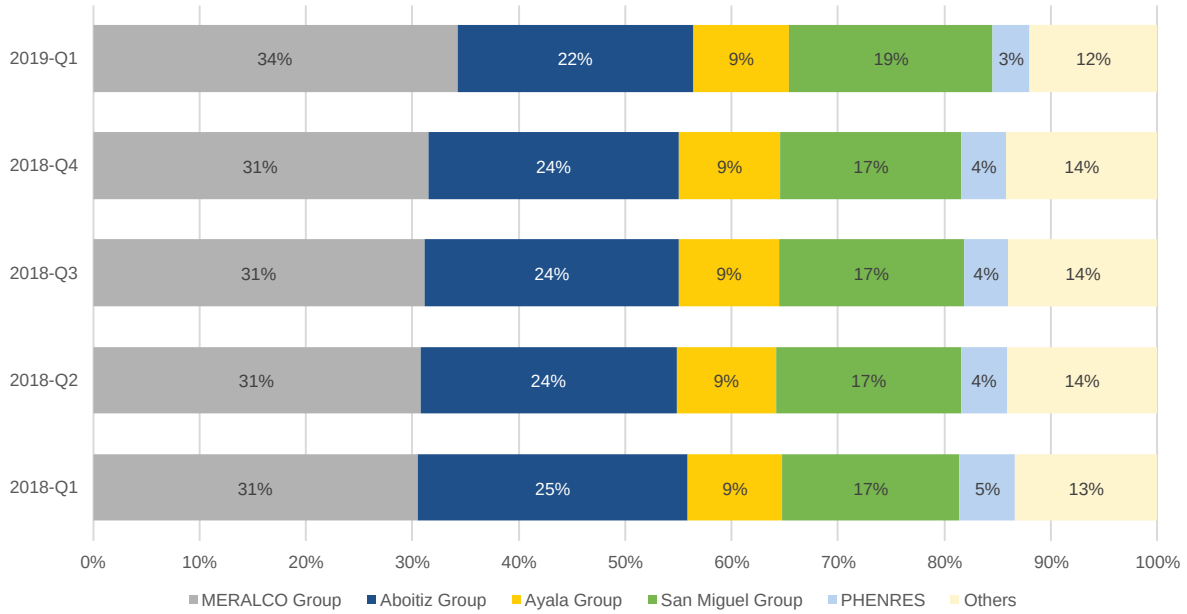

Figure 6. Share in Total Energy Consumption of CCs Per Major Participant, 2018-Q1 to 2019-Q1

In terms of location, registered Contestable Customers were scattered within the different distribution utility franchise areas and economic zones listed in **Table 5**.

Table 5. List of Distribution Utility Franchise Areas and Economic Zones

No.	Short Name	Distribution Utility/ Economic Zone
1	AEC	Angeles Electric Corporation
2	AFAB	Authority of the Freeport Area of Bataan
3	AKELCO	Aklan Electric Cooperative, Inc.
4	ALECO	Albay Electric Cooperative, Inc.
5	ANTECO	Antique Electric Cooperative, Inc.
6	BATELEC I	Batangas I Electric Cooperative, Inc.
7	BATELEC II	Batangas II Electric Cooperative
8	BEZ	Balamban Enerzone Corporation
9	BLCI	Bohol Light Company, Inc.
10	BOHECO I	Bohol I Electric Cooperative, Inc.
11	CASURECO II	Camarines Sur II Electric Cooperative, Inc.
12	CEBECO I	Cebu I Electric Cooperative, Inc.
13	CEBECO II	Cebu II Electric Cooperative, Inc.
14	CEDC	Clark Electric Distribution Corporation
15	CELCOR	Cabanatuan Electric Corporation
16	DECORP	Dagupan Electric Corporation
17	FIT	First Industrial Township Utilities, Inc.
18	ILECO I	Iloilo I Electric Cooperative, Inc.
19	INEC	Ilocos Norte Electric Cooperative, Inc.
20	ISECO	Ilocos Sur Electric Cooperative, Inc.
21	ISELCO I	Isabela I Electric Cooperative, Inc.
22	LEYECO II	Leyte II Electric Cooperative, Inc.
23	LEYECO V	Leyte V Electric Cooperative, Inc.
24	LEZ	LIMA Enerzone Corporation
25	LUELCO	La Union Electric Cooperative, Inc.
26	MECO	Mactan Electric Company
27	MERALCO	Manila Electric Company
28	MEZ	Mactan Economic Zone
29	NEECO I	Nueva Ecija I Electric Cooperative, Inc.
30	NORECO II	Negros Oriental II Electric Cooperative, Inc.
31	OEDC	Olongapo Electricity Distribution Company
32	PANELCO III	Pangasinan III Electric Cooperative, Inc.
33	PECO	Panay Electric Co., Inc.
34	PELCO II	Pampanga II Electric Cooperative, Inc.
35	PELCO III	Pampanga III Electric Cooperative, Inc.
36	PENELCO	Peninsula Electric Cooperative, Inc.
37	PEZA	Philippine Economic Zone Authority
38	QUEZELCO I	Quezon I Electric Cooperative, Inc.
39	SAMELCO I	Samar I Electric Cooperative, Inc.
40	SEZ	Subic EnerZone Corporation
41	SFELAPCO	San Fernando Electric Light and Power Company, Inc.
42	TARELCO I	Tarlac I Electric Cooperative, Inc.
43	TARELCO II	Tarlac II Electric Cooperative, Inc.
44	TEI	Tarlac Electric, Inc.
45	VECO	Visayan Electric Company, Inc.
46	*NGCP	National Grid Corporation of the Philippines

Majority or about 73 percent of the registered Contestable Customers were located within the franchise area of MERALCO (**Figure 7(a)**). It should be noted, however, that not all of these registered Contestable Customers were being supplied by MRLCOLRE, as some of them tap the other Suppliers for their energy requirements. About 6 percent were within VECO and 112 percent were scattered within the other distribution utility franchise areas and economic zones. Meanwhile, 9 percent of the registered Contestable Customers were directly connected to the transmission grid.

With majority of the registered Contestable Customers located within the MERALCO franchise area, bulk of the energy consumption of registered Contestable Customers during the period in review was also accounted for by registered Contestable Customers within that franchise area.

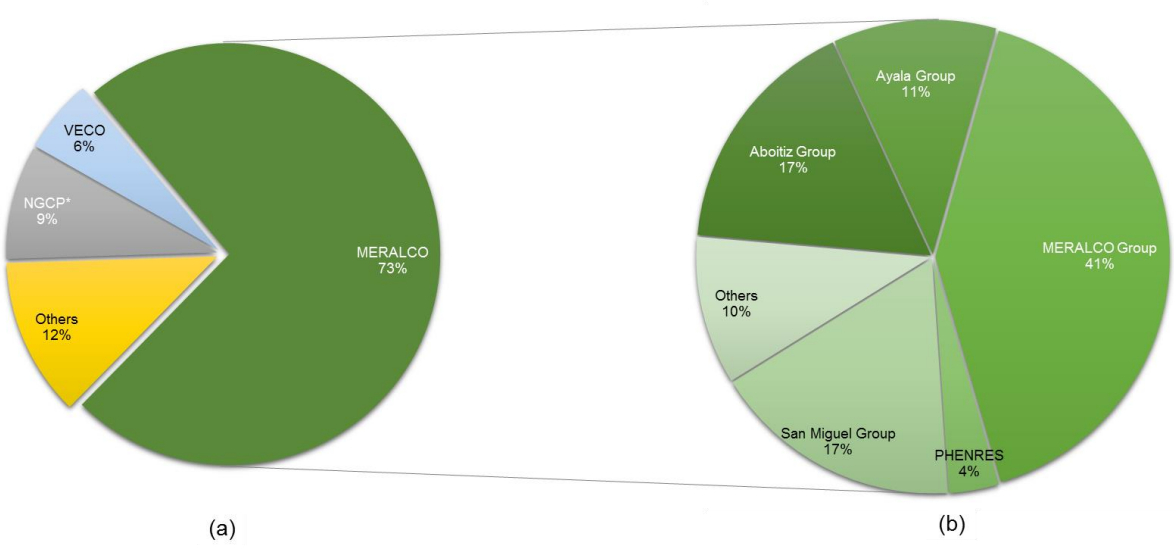

Figure 7. (a) Energy Consumption of CCs by Franchise Area, 2019-Q1

Figure 8. (b) Energy Consumption by Supplier within MERALCO Franchise Area, 2019-Q1

Within the MERALCO franchise area, 41 percent of the energy consumption of registered Contestable Customers was supplied by MRLCOLRE and its other affiliate suppliers, while the remaining 59 percent were supplied by other Retail Electricity Suppliers serving within the MERALCO franchise area (**Figure 7(b)**).

2. Herfindahl–Hirschman Index (HHI)

The quarter-on-quarter level of market concentration using the Herfindahl-Hirschman Index (HHI)[3] from the first quarter of 2018 to the first quarter of 2019 is shown in **Figure 8**. The HHI values shown in the figures on market share of major participants were based on the latest grouping of the ERC.

The HHI values based on number of registered Contestable Customers and their consumption consistently fell within the concentrated area throughout all the quarters in comparison. A decreasing trend in the HHI values based on number of registered Contestable Customers may be observed from 2018-Q1 until 2018-Q3,

[3] HHI measures the degree of market concentration. Defined as the sum of the Suppliers' market share, the HHI threshold are as follows:
HHI < 1000 - not concentrated
1000 – 1800 - moderately concentrated
Greater than 1800 up to 2500 - concentrated
Greater than 2500 - highly concentrated

but the same slowly increased beginning 2018-Q4 until the quarter in review. On the other hand, the HHI values based on consumption of Contestable Customers may be observed to be alternately decreasing and increasing from 2018-Q1 until the quarter in review.

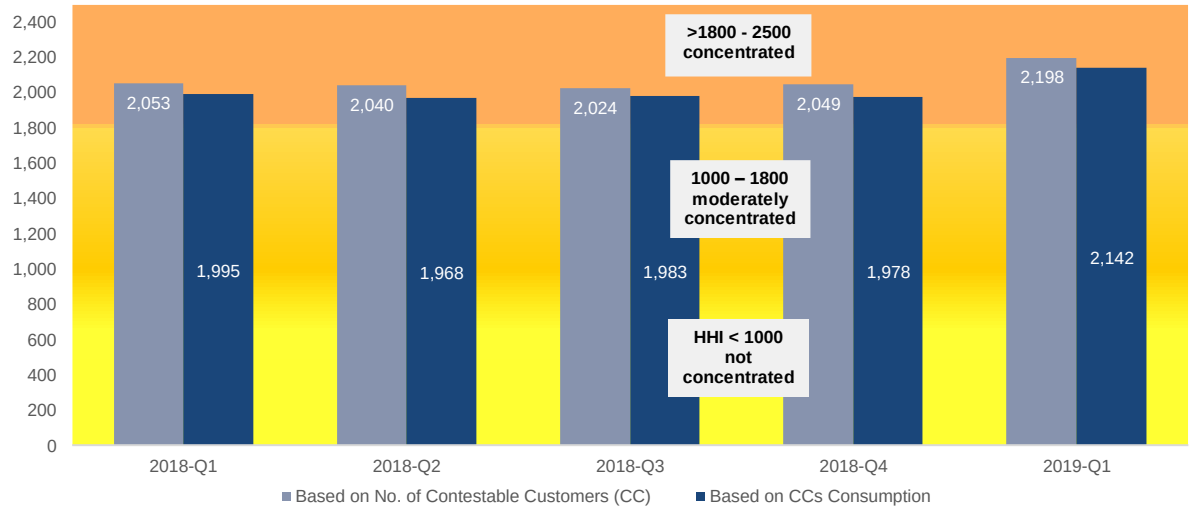

Figure 9. HHI Values Based on Number of CCs and CC Consumption, 2018-Q1 to 2019-Q1

3. Four-Firm Concentration Index (C4)

The four-firm index or C4 value, as shown in **Figure 9**, were still high falling above 84 percent throughout the quarters in review based both on the number of registered Contestable Customers and their consumption. Note that the top four (4) Suppliers used in this index were determined based on the latest major participants grouping of the ERC.

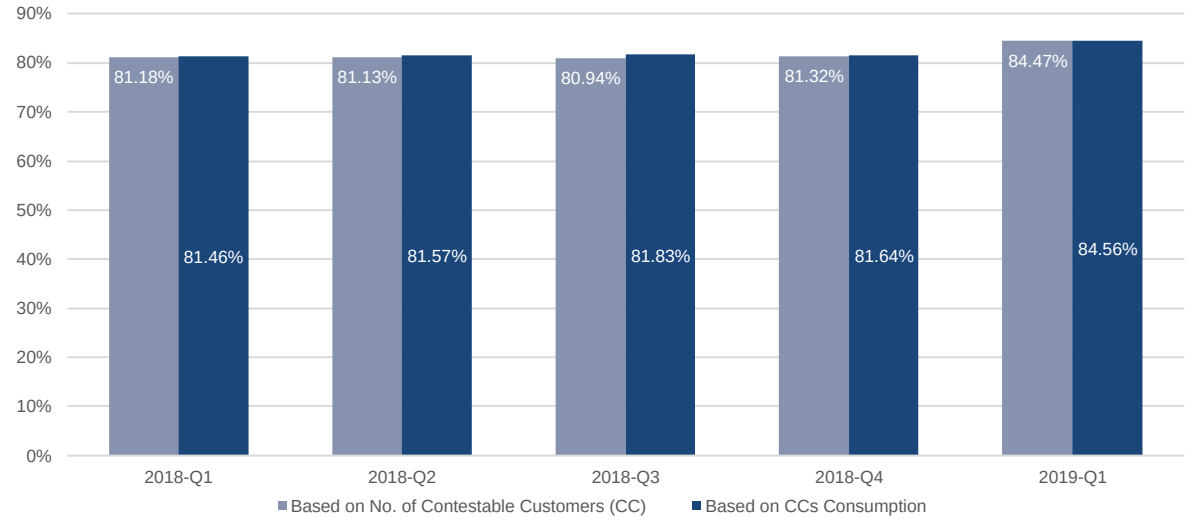

Figure 10. Four-Firm Index, 2018-Q1 to 2019-Q1

4. Supplier Structure

Table 6 shows the degree of integration among the Suppliers, Generation Companies, and Distribution Utilities as of March 2019[4]. The Supplier structure shows that majority of the Retail Electricity Suppliers had affiliate Generation Companies. Note that one Supplier may have multiple affiliate Generation Companies, Suppliers, and/or Distribution Utilities.

Table 6. Summary of Suppliers with Affiliate Generation Companies, Suppliers and Distribution Utilities

Category	No. of Registered Suppliers	No. of Suppliers with Affiliate Generator	No. of Suppliers with Affiliate Supplier	No. of Suppliers with Affiliate DU
Retail Electricity Supplier	31	25	13	10
Local Retail Electricity Supplier	14	4	5	3
Supplier of Last Resort	24	5	7	4
Total	**69**	**34**	**25**	**17**

II. MARKET PERFORMANCE

A. Total Energy Consumption

The quarter-on-quarter total energy consumption from first quarter of 2018 to first quarter of 2019 is shown in **Figure 10**. The total energy consumption described in this section includes both that of the Captive[5] and registered Contestable

[4] Based on ERC data.

[5] Captive Customer consumption for this purpose is the energy consumption of customers of Private Distribution Utilities (PDU) and Electric Cooperatives (EC), as well as other consumption associated Directly-Connected Customers (DCC), Network Services Providers (NSP), Kalayaan pumping and other generator-related consumption.

Customers. The energy consumption for the first quarter of 2019 was observed to be slightly higher than the same period of the previous year from about 17,924 GWh to about 18,383 GWh, translating to about 3 percent increase. On the other hand, this quarter recorded a faint 7 percent decrease in energy consumption from the previous quarter's consumption at 19,765 GWh.

Factors such as temperature and seasonal changes, as well as the economic activities during certain periods of the year may well had played a role in the varying level of energy consumption per quarter. Based on **Figure 10**, the pattern of energy consumption was observed to be highest during the second quarter covering the summer months of April to June. Meanwhile, energy consumption was observed to be at its lowest during the first quarter, which may be attributable to the slowing down of activities after the holidays by the end of the fourth quarter.

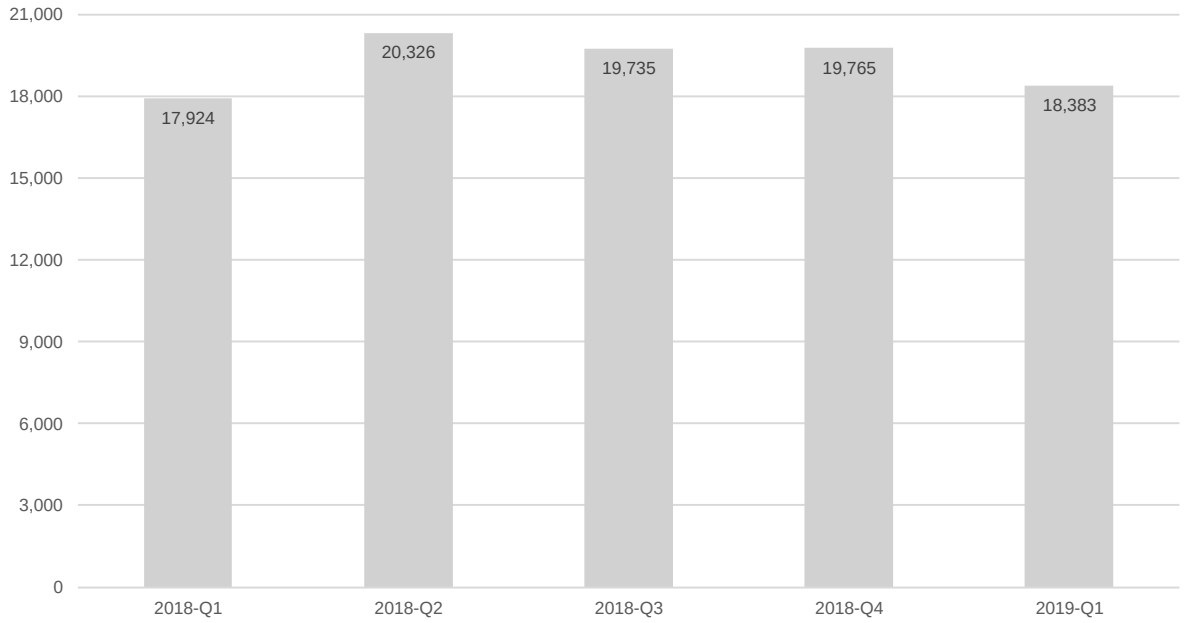

Figure 11. Total Energy Consumption (in GWh), 2018-Q1 to 2019-Q1

The monthly total energy consumption from January 2018 to March 2019 is shown in **Figure 11**. For the first quarter of 2019 alone, the highest energy consumption was recorded in February at about 6,202 GWh, while the lowest energy consumption was in January at 6,046 GWh.

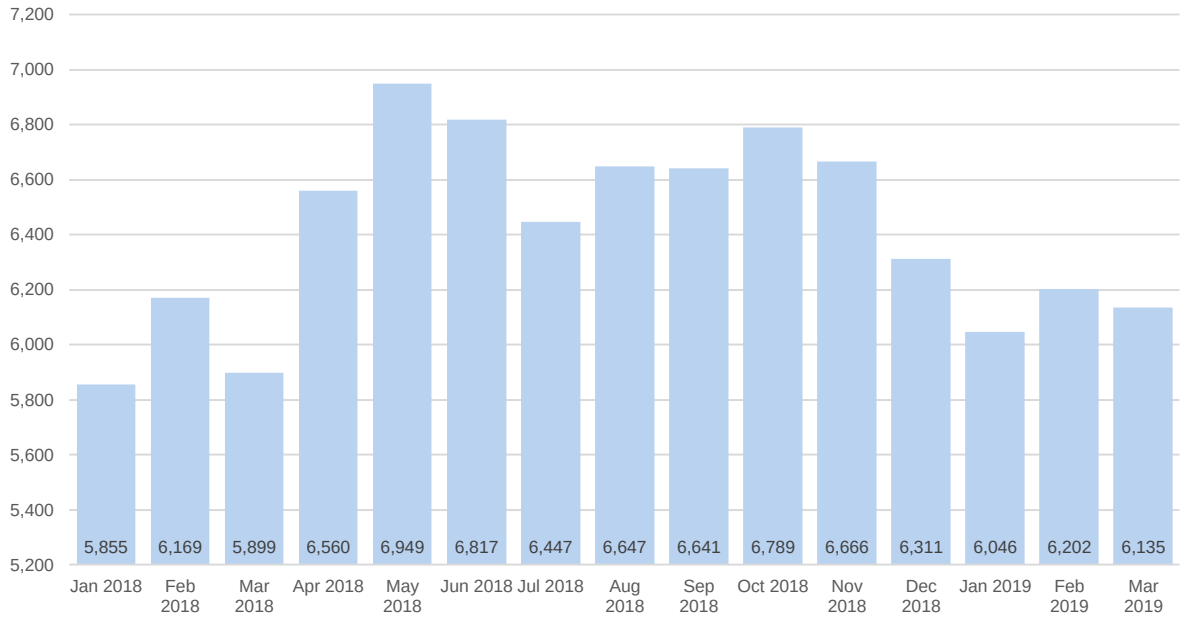

Figure 12. Monthly Total Energy Consumption (in GWh), 2018-Q1 to 2019-Q1

B. Energy Consumption by Type of End-User

Shown in **Figure 12** is the quarterly total energy consumption by type of end-user consisting of the Captive Customers[6] and the registered Contestable Customers.

In comparison with the previous quarter's 15,140 GWh, the energy consumption of Captive Customers for the first quarter of 2019 decreased to 13,907 GWh, translating to a 8 percent decrease. This was however slightly lower when compared to the same period of the previous year which was recorded at 13,922 GWh.

On the other hand, consumption of registered Contestable Customers slightly decreased from about 4,626 GWh in the previous quarter to about 4,477 GWh in the first quarter of 2019. This was however significantly higher when compared to the same period of the previous year which was recorded at 4,002 GWh.

The higher consumption of registered Contestable Customer was a function of both the increased demand for electricity and the growing number of participants in the retail market.

[6] Captive Customer consumption for this purpose is the energy consumption of customers of Private Distribution Utilities (PDU) and Electric Cooperatives (EC), as well as other consumption associated Directly-Connected Customers (DCC), Network Services Providers (NSP), Kalayaan pumping and other generator-related consumption.

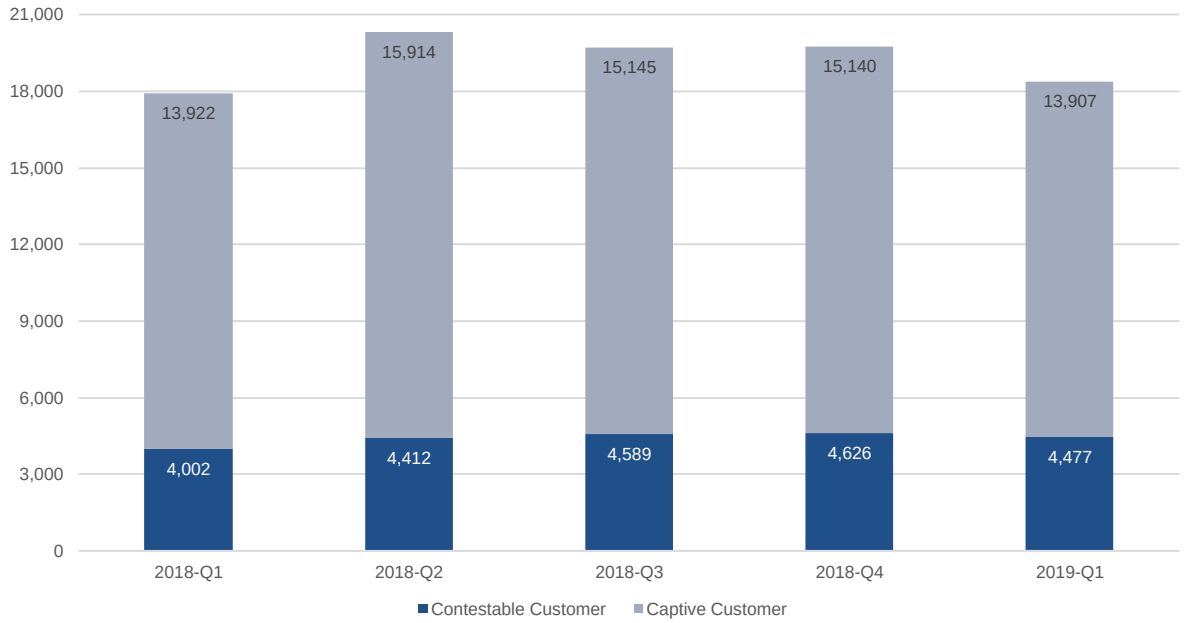

Figure 13. Total Energy Consumption (in GWh) Per Type of End-User, 2018-Q1 to 2019-Q1

C. Share in Energy Consumption by Type of End-User

The share of registered Contestable Customers and Captive Customers in the total energy consumption based on WESM transactions for the comparative periods in review is shown in **Figure 13.** From about 23 percent share during the first quarter of 2018, the share of the registered Contestable Customers slightly increased to about 24 percent in the same quarter of 2018. Such increase may be attributable to several factors including the increased participants in the retail market and the increasing demand for electricity by this type of end-users.

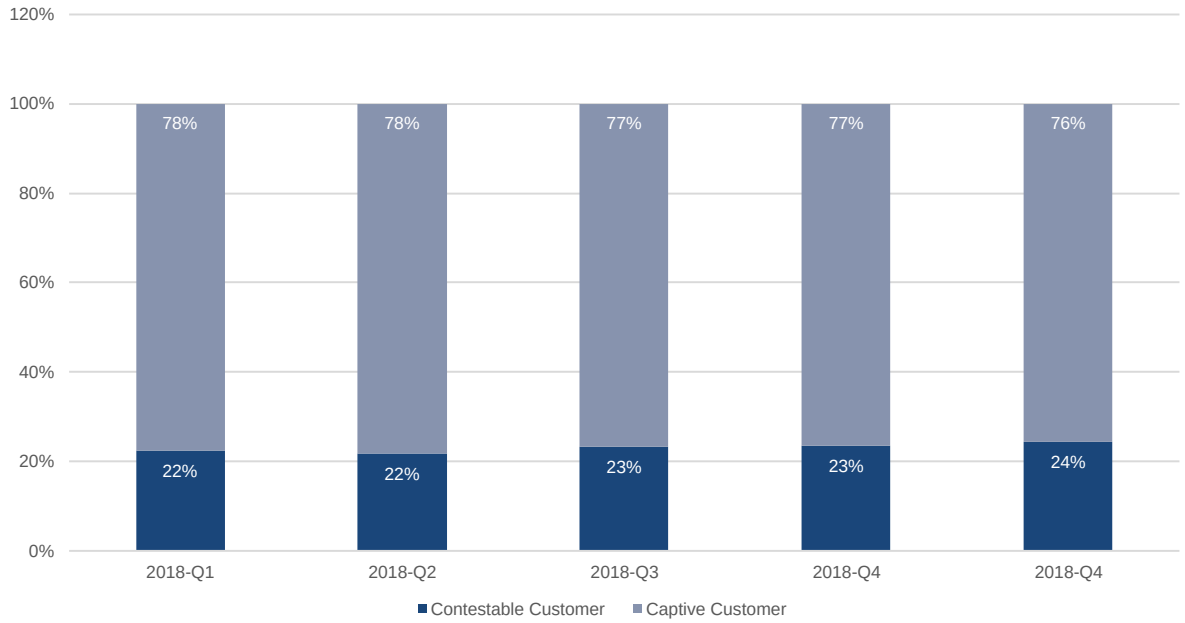

Figure 14. Share in Total Energy Consumption Per Type of End-User, 2018-Q1 to 2019-Q1

D. Hourly Energy Consumption Profile of Registered Contestable Customers

Figures 14 and 15 show the hourly average consumption per month of registered industrial and commercial Contestable Customers, respectively, for the billing months October 2018 to March 2019. The consumption profile demonstrates how their electricity consumption varied over the course of a 24-hour period.

As shown in **Figure 14,** the electricity consumption of industrial Contestable Customers, generally, did not show substantial peak and off-peak variation. A dip in their average energy consumption was generally observed during intervals 0700H, 1300H, and 1900H, denoting that they operate on three shifts.

Furthermore, the month-on-month comparison of their hourly consumption profile denotes that regardless of seasonal changes and varying temperatures throughout the year, the pattern of electricity consumption of the registered industrial Contestable Customers during the course of a day was approximately the same for any given month.

For the first quarter of 2019, the highest hourly average energy consumption of registered industrial Contestable Customers was recorded in March t 2200H (about 1,450 MWh) while the lowest average energy consumption was noted in January billing month at 0600H (about 1,240MWh).

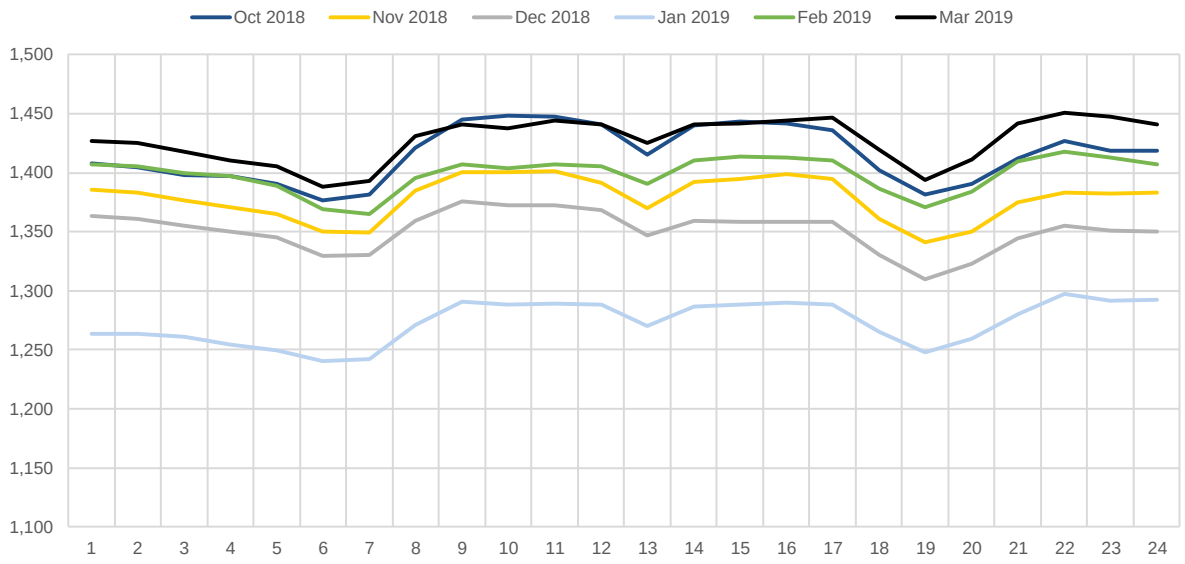

Figure 15. Hourly Average Energy Consumption (in MWh), Industrial CCs, Oct 2018 to Mar 2019

The registered commercial Contestable Customers, on the other hand, showed a substantial variation in their peak and off-peak consumption as shown in **Figure 15**. Peak consumption of registered Commercial Contestable Customers was generally observed from around 0900H to 2000H.

The highest hourly average energy consumption of registered commercial Contestable Customers during the first quarter of 2019 was recorded in March 2019 at 1500H (about 1,050 MWh) while the lowest average energy consumption was noted in January at 0400H (about 386 MWh).

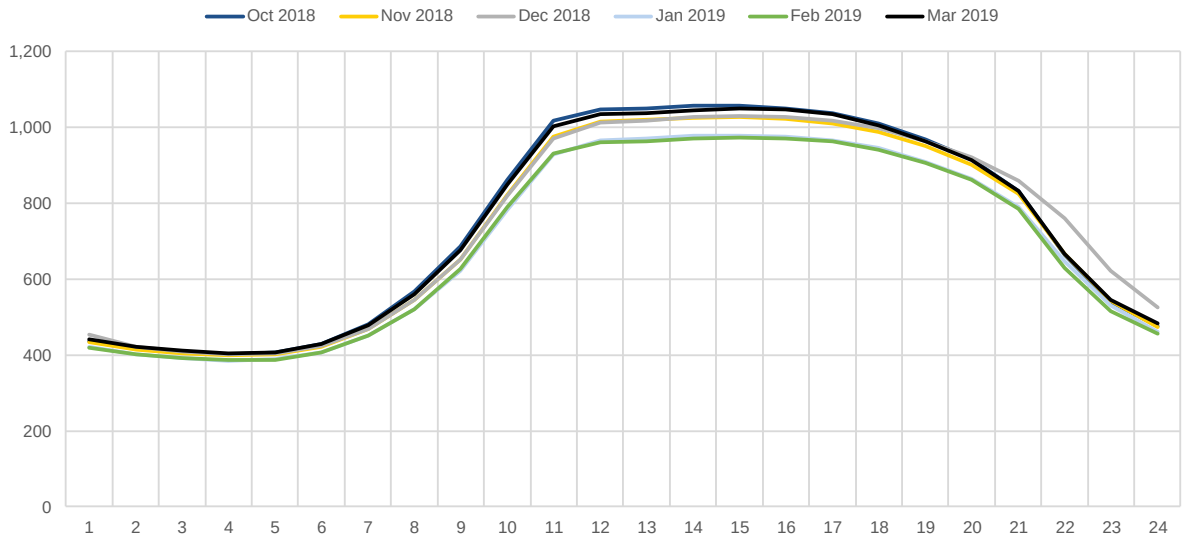

Figure 16. Hourly Average Energy Consumption (in MWh), Commercial CCs, Oct 2018 to Mar 2019

E. Load Factor

Figure 16 shows the monthly load factor[7] of registered Contestable Customers, which was calculated based on their actual electricity consumption. The load factor of registered Contestable Customers was maintained relatively high ranging from 77 to 82 percent during the first quarter of 2019. By the end of March 2019, the load factor stood at 81 percent coming from 78 percent in December 2018.

The high load factor reflects a reasonably efficient electricity usage of registered Contestable Customers.

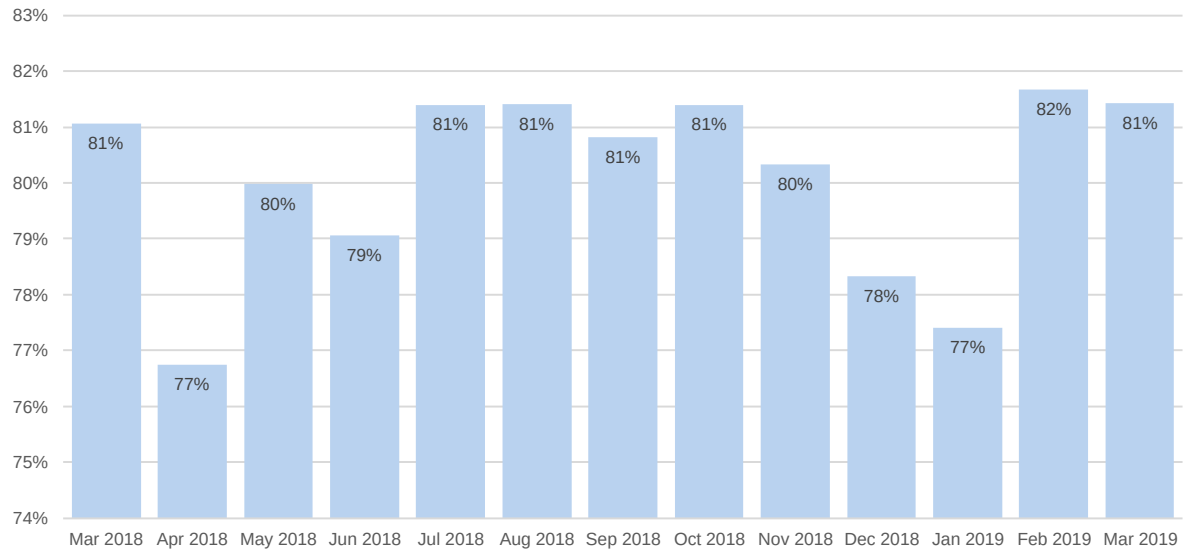

Figure 17. CC Load Factor, Mar 2018 to Mar 2019

III. RETAIL ACTIVITY

A. Customer Participation Level

The registered Contestable Customers in the commercial sector slightly increased from a share of about 51 percent by the end of the fourth quarter of 2019 to about 52 percent by the end of March 2019 billing month. The quarterly share of registered commercial and industrial Contestable Customers from end of March 2018 to end of March 2019 is shown in **Figure 17**.

[7] Based on Metered Quantity (MQ)

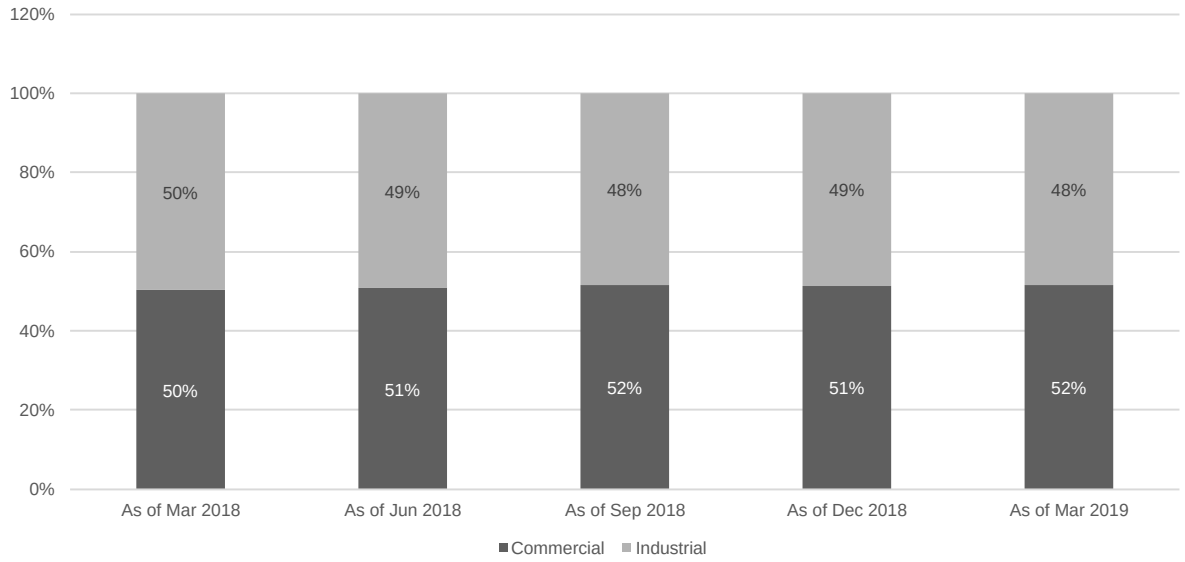

Figure 18. Percentage of CCs Per Industry Type, Mar 2018 to Mar 2019

B. Customer Switching Rate

Table 7 shows the switching rate among registered Contestable Customers for the period covered in this report. Based on the data, fifty-eight (58) switches from one Supplier to another were recorded during the January to March 2019 billing months. Thirty-eight (38) of the switches were from Retail Electricity Supplier to Retail Electricity Supplier, while the remaining twenty (20) were from Retail Electricity Supplier to Local Retail Electricity Supplier.

Table 7. Customer Switching Rate

Particulars	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019
Switching Rate (Luzon)	**0.35%**	**4.20%**	**0.22%**	**0.32%**	**0.11%**	**1.65%**	**0.10%**	**0.00%**	**0.19%**	**0.00%**	**0.28%**	**2.04%**	**0.64%**	**3.72%**	**0.00%**
Total No. of CCs	868	880	914	933	949	968	1,008	1,028	1,034	1,045	1,059	1,080	1091	1103	1119
Total No. of CCs that Switched	*3*	*37*	*2*	*3*	*1*	*16*	*1*	*0*	*2*	*0*	*3*	*22*	*7*	*41*	
LRES to RES	*3*	*4*		*1*		*2*						*4*			
RES to LRES		19				5					1	2	3	17	
RES to RES		*14*	*2*	*2*	*1*	*9*	*1*		*2*		*2*	*16*	*4*	*24*	
SOLR to RES															
Switching Rate (Visayas)	**0.00%**	**3.53%**	**0.00%**	**1.10%**	**0.00%**	**0.00%**	**1.04%**	**0.00%**	**0.97%**	**0.88%**	**0.00%**	**5.93%**	**5.08%**	**3.36%**	**0.00%**
Total No. of CCs	84	85	88	91	94	96	96	99	103	114	118	118	118	119	121
Total No. of CCs that Switched	0	3	0	1	0	0	1	0	1	1	0	7	6	4	
LRES to RES															
RES to RES		3		1			1		1	1		7	6	4	
Switching Rate (Luzon-Visayas)	**0.32%**	**4.15%**	**0.20%**	**0.39%**	**0.10%**	**1.50%**	**0.18%**	**0.00%**	**0.26%**	**0.09%**	**0.25%**	**2.42%**	**1.08%**	**3.68%**	**0.00%**
Total No. of CCs	952	965	1,002	1,024	1,043	1,064	1,104	1,127	1,137	1,159	1,177	1,198	1209	1222	1240
Total No. of CCs that Switched	3	40	2	4	1	16	2	0	3	1	3	29	13	45	0