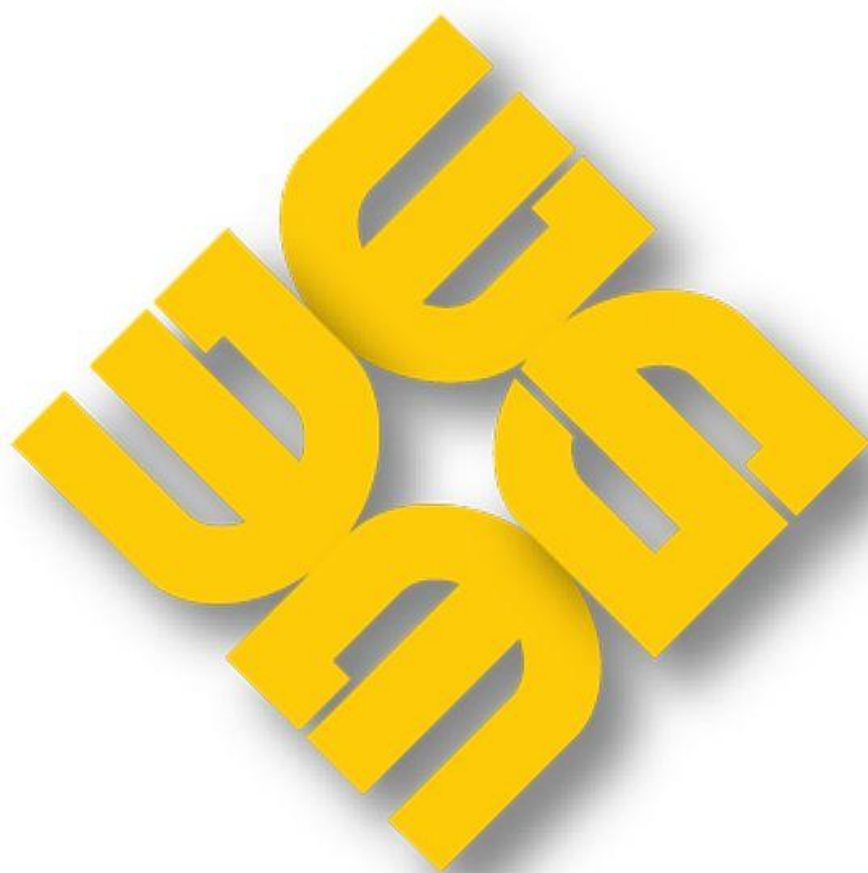


MAG-RMAR-2019-02

QUARTERLY RETAIL MARKET ASSESSMENT REPORT

26 March – 25 June 2019



**PHILIPPINE
ELECTRICITY
MARKET
CORPORATION**

**MARKET ASSESSMENT GROUP
(MAG)**

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Executive Summary

This Quarterly Assessment Report on the Retail Electricity Market covers the billing period **26 March to 25 June 2019**. As of 25 June 2019, there were a total of 1,306 registered Contestable Customers (from previous quarter's 1,240 registered Contestable Customers). Likewise, the market recorded a total of 31 registered Retail Electricity Suppliers (RES), 14 registered Local RES (LRES), and 25 registered Supplier of Last Resort (SOLR).

Majority or 1,177 registered Contestable Customers were in Luzon and the remaining 129 registered Contestable Customers were in Visayas. Of the total registrants, 20 percent were in the 750 kW to 999 kW contestability threshold, while 80 percent were in the 1 MW and above contestability threshold. It may be noted that Contestable Customers were engaged mostly in commercial activities (677 registrants) and industrial activities (629 registrants). The total registrants constitute about 68 percent of the 1,907 electricity end-users with ERC Certificate of Contestability. The remaining 32 percent of electricity end-users have yet to register in the market.

The total energy consumption of the registered Contestable Customers for the second quarter of 2019 stood at about 4,960 GWh. This consumption level accounts for about 22 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 81 percent throughout the period in review, indicating that their electricity usage was reasonably efficient. By the end of June 2019 billing month, the load factor stood at 80.50 percent coming from 81.43 percent in March 2019.

Majority of the registered Contestable Customers were located within the MERALCO franchise area. Changes were observed in the shares of participants, which were driven by several factors such as 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. By the end of June 2019 billing month, about 36 percent of all registrants were supplied by the MERALCO group. This was followed by the Aboitiz group at 21 percent share, the San Miguel group at 20 percent share, the Ayala group at 10 percent share and PHENRES at 2 percent. As indicated by the HHI, the level of market concentration based on the ERC's major participant grouping fell within the concentrated area both in consumption and number of registered Contestable Customers.

Sixteen (16) switches from one Supplier to another were recorded during the period in review. Twelve (12) of the switches were from Retail Electricity Supplier to Retail Electricity Supplier, while three (3) of the switches were from Retail Electricity Supplier to Local Retail Electricity Supplier. Only one (1) Contestable Customer switched from Local Retail Electricity Supplier to 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 1,064 Contestable Customers in June 2018, to 1,306 registrants by the end of the June 2019 billing period as seen in **Figure 1**. This was around 68 percent of the 1,907 qualified electricity end-users already issued with a certificate of contestability¹. This period marked a 5 percent increase from the previous quarter's 1,240 registrants, and a significant 23 percent increase from the same period of last year's 1,064 registrants.

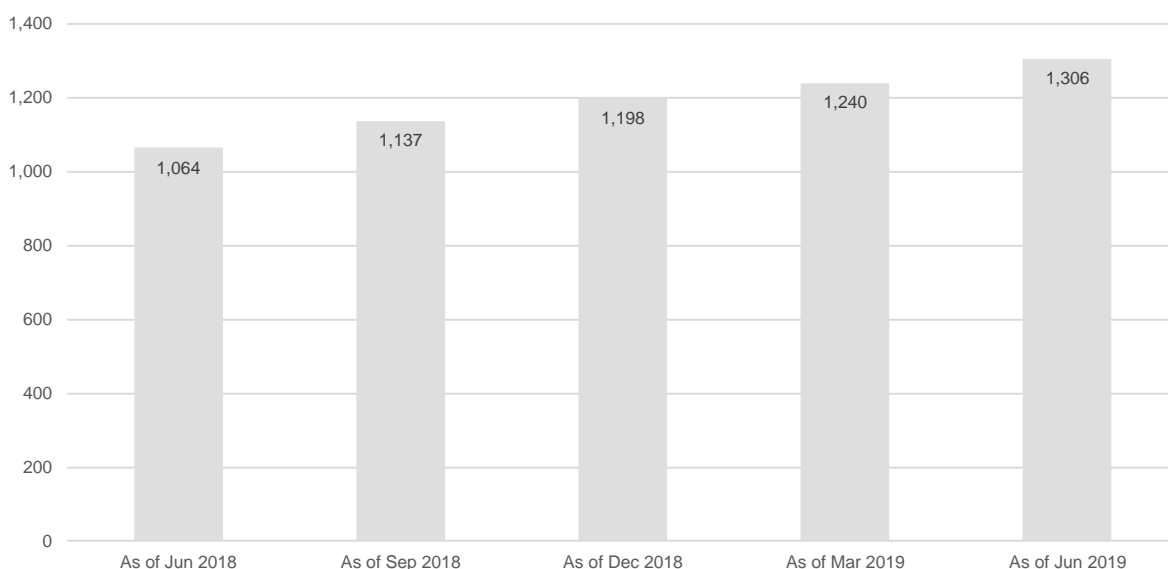


Figure 1. Cumulative Number of CCs, Jun 2018 to Jun 2019

¹ Monthly Statistical Data as of June 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 June 2019 billing period, the market recorded 265 registrants in the 750-999 kW contestability threshold. This was about 20 percent of all the Contestable Customers registered in the market. The remaining 1,041 or about 80 percent was classified under 1 MW & above contestability threshold.

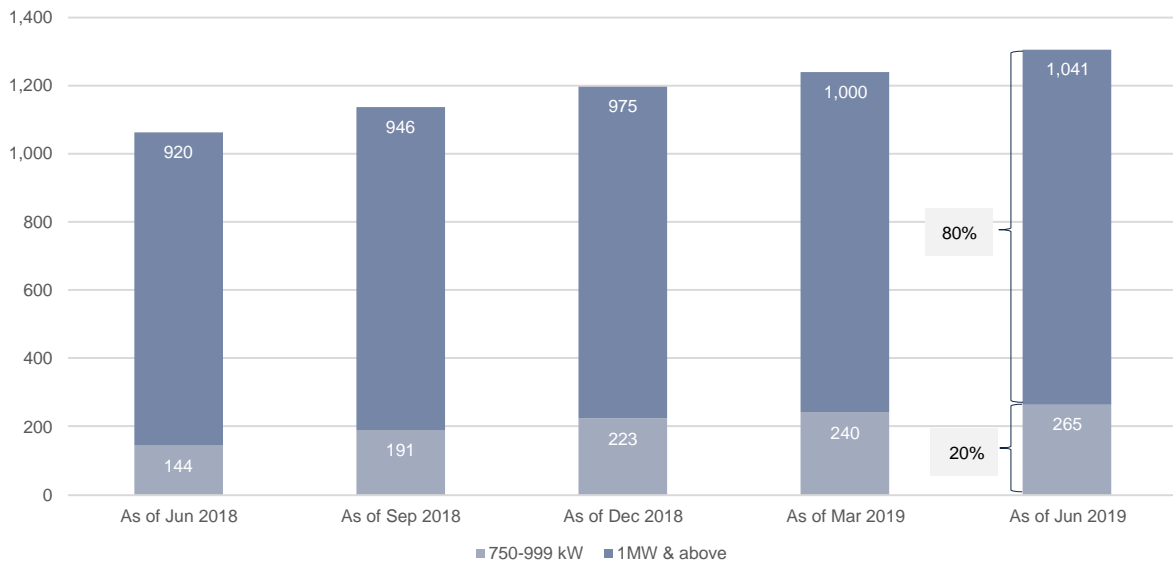


Figure 2. Cumulative Number of CCs Per Contestability Threshold, Jun 2018 to Jun 2019

In terms of distribution by region, majority of Contestable Customers or about 90 percent (1,177 Contestable Customers) were located in Luzon while about 10 percent (129 Contestable Customers) were located in Visayas. The number of registered Contestable Customers per region by the end of each relevant quarter is shown in **Figure 3**.

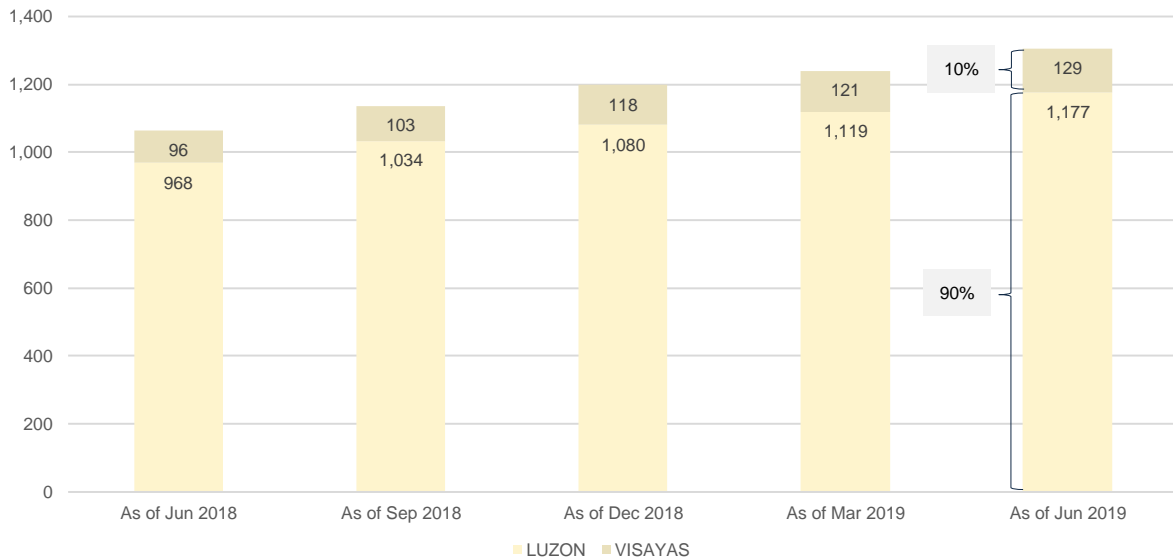


Figure 3. Cumulative Number of CCs Per Region, Jun 2018 to Jun 2019

Figure 4 shows the cumulative number of registered Contestable Customers per type of retail activity by the end of each relevant quarter. As of June 2019 billing period, the market was comprised of 629 Contestable Customers (about 48 percent) that were engaged into industrial activities and 677 Contestable Customers (about 52 percent) that were into commercial activities.

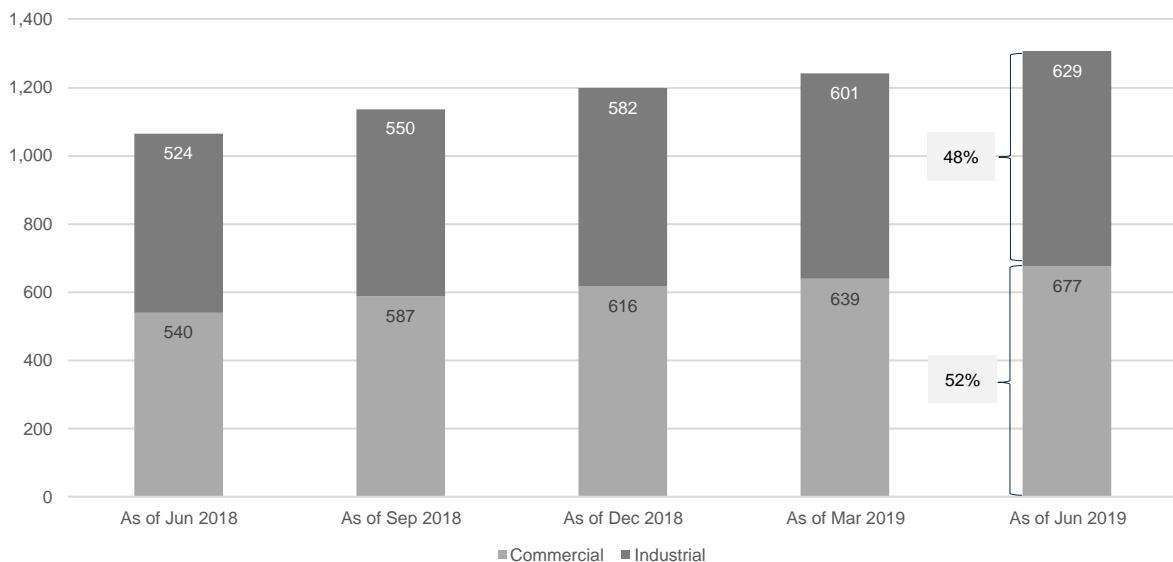


Figure 4. Cumulative Number of CCs Per Retail Activity, Jun 2018 to Jun 2019

Table 1 shows the percentage of registered Contestable Customers per level of maximum energy consumption based on their metered quantity (MQ). From April to June 2019 billing months, majority or about 53 percent of the registrants had maximum energy consumption ranging above 1 MWh to 5 MWh. Meanwhile, about

17 percent of the registered Contestable Customers had maximum energy consumption ranging above 5 MWh to 10 MWh, while about 13 percent had maximum energy consumption ranging above 20 MWh to 50 MWh during the period.

Table 1. Percentage of CCs Per Level of Maximum Energy Consumption, 2019-Q2

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	5.54%	47.90%	16.03%	7.56%	2.03%	10.09%	0.00%	89.16%
VISAYAS	0.53%	5.12%	0.92%	0.34%	0.00%	2.47%	1.46%	10.84%
Sub-Total Per Level of Maximum Energy Consumption	6.08%	53.02%	16.95%	7.90%	2.03%	12.56%	1.46%	100.00%

2. Number of 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 June 2019

Category	No. of Suppliers	
	Total Registered	With CCs Served
Retail Electricity Supplier	31	29
Local Retail Electricity Supplier	14	3
Supplier of Last Resort	25	0
Total	70	32

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

Table 3. List of Suppliers Per Category, as of 25 June 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	25	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	CELCORSRLR
		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 Electric, Inc.	TEISLR
		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

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 grouping² which reflects the affiliation among the Suppliers.

MRLCOLRE has the most number of registered Contestable Customers at 403 as of June 2019 billing period. Next were AESIRES with 178 Contestable Customers, SMELCRES with 110 Contestable Customers, and ACERES with 88 Contestable Customers, and ADVENTRES with 67 Contestable Customers.

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

Market Participant Group	As of Jun 2018	As of Sep 2018	As of Dec 2018	As of Mar 2019	As of Jun 2019
Aboitiz Group	279	288	306	316	318
ADVENTRES	78	77	77	72	67
AESIRES	152	155	159	172	178
MACRES	2	3	3	4	3
PRISMRES	23	25	37	39	39
SFELAPLRE	1	1	1	1	1
SNAPRES	23	27	29	28	30
Ayala Group	141	149	154	155	220
ACERES	64	69	72	71	88
DIRPOWRES	37	37	38	40	45
EPMIREs	40	43	44	44	44
PHENRES ^a					43
MERALCO Group	338	365	390	433	452
CEDCLRE	6	6	6	6	8
MRLCOLRE	309	331	353	386	403
MRLCOSLR					
VESMIREs	23	28	31	41	41
PHENRES	69	77	74	40	0
PHENRES	69	77	74	40	
San Miguel Group	102	115	121	140	164
MPPCLRES ^{aa}					6
SMCCPCRES	6	9	10	30	48
SMELCRES	96	106	111	110	110
Others	131	139	149	152	148
ANDARES	1	1	1	2	3
BGIRES	20	21	24	43	47
CESIRES	2	2	2	2	2
CORERES	1	2	2	2	2
FDCRESC	10	11	12	12	12
FGESRES	26	27	28	13	11
GESCRES	16	15	16	14	15
GNPLCRES	4	4	4	4	4
KRATOSRES	12	16	17	19	20
KSPCRES	2	3	3	3	3
MANTARES	2	2	2	2	2
MERXRES					1
MPPCLRES	3	3	6	6	
PERCRES	12	12	12	12	11
SCRCRES			1	1	3
TPECRES	19	19	18	16	11
WAHCRES	1	1	1	1	1
TOTAL	1,060	1,133	1,194	1,236	1,302

Note: Per the ERC CREM Report as of June 2019, ^aPHENRES is under the Ayala group while ^{aa}MPPCLRES is under the San Miguel group

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

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 June 2019 billing period.

Over the years, a significant drop in the MERALCO group's share was observed. From about 63 percent at the start of RCOA implementation in July 2013 billing month, its share was halved to 32 percent by the end of the September 2018. Its share started to slightly increase thereafter that by the end of June 2019 billing month, the MERALCO group's share in terms of the number of registered Contestable Customers served, was recorded at about 35 percent.

The increase in share of the MERALCO group was attributable to the registration of 16 new Contestable Customers during the first quarter of 2019 and 13 new Contestable Customers during the second quarter of 2019. Further, during the first quarter of 2019, eighteen (18) Contestable Customers switched from PHENRES to Suppliers under the MERALCO group, and four (4) Contestable Customers switched from Suppliers under the Ayala Group to Suppliers under the MERALCO group.

Likewise, during the second quarter of 2019, three (3) Contestable Customers switched from Suppliers under the Aboitiz group to Suppliers under the MERALCO group. Consequently, this resulted to the decrease in the share of the Aboitiz group during the second quarter of 2019, to about 24 percent from about 25 to 26 percent during end of the previous quarters.

A noticeable increase in the Ayala group's share was observed, from about 13 percent during the end of the previous quarter to about 17 percent by the end of the June 2019 billing month. The gradual increase in the share of the Ayala group was attributable to the registration of eighteen (18) new Contestable Customers during the second quarter of 2019. Similarly, the San Miguel group's share significantly increased to about 13 percent coming from about 10 to 11 percent during the end of the previous quarters. This increase was attributable to the registration of eight (8) new Contestable Customers and switching of three (3) Contestable Customers from TPECRES to SMCCPCRES.

Another reason for the increase in the Ayala group and the San Miguel group's share is the start of affiliation of PHENRES with the Ayala group and MPPCLRES with the San Miguel group, as reported in the ERC Competitive Retail Electricity Market (CREM) Report for June 2019.

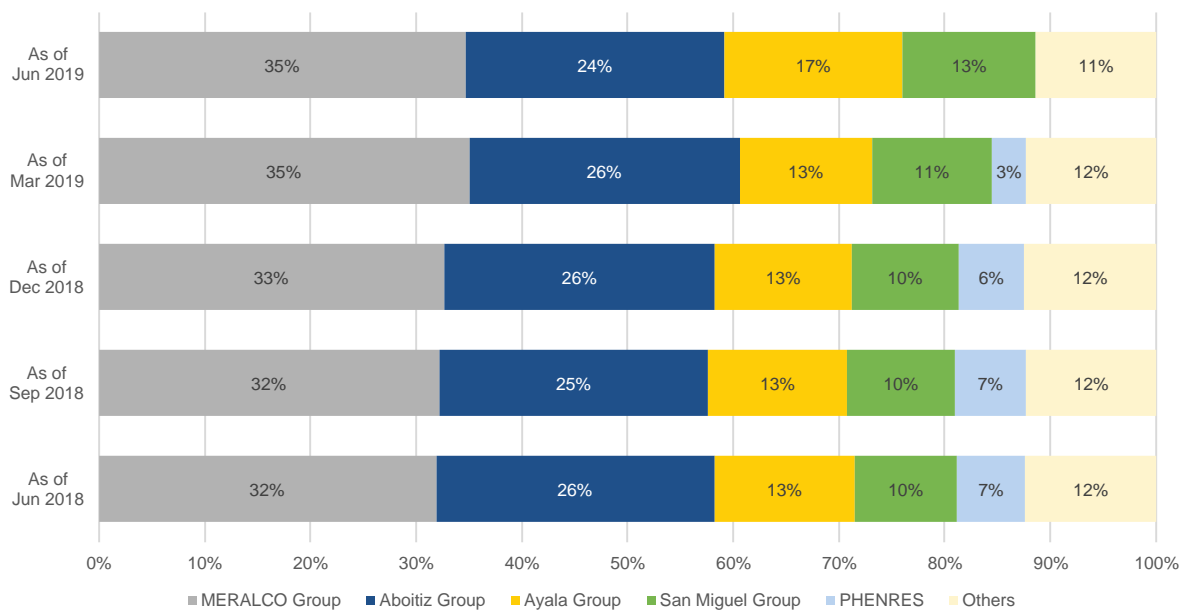


Figure 5. Share in Number of CCs Per Major Participant, Jun 2018 to Jun 2019

Similarly, the MERALCO group had the largest share at 36 percent in terms of registered Contestable Customer consumption for all the quarters in review as seen in **Figure 6**. The Aboitiz group followed at 21 percent. Meanwhile, the San Miguel group continued to increase its share to about 20 percent share by the end of the June 2019 billing month. This was significantly higher than the 17 percent share it had during the same quarter of the previous year. The Ayala group likewise increased its share to 10 percent from the previous quarter's 9 percent while PHENRES still has around 2 percent share in terms of registered Contestable Customer Consumption.

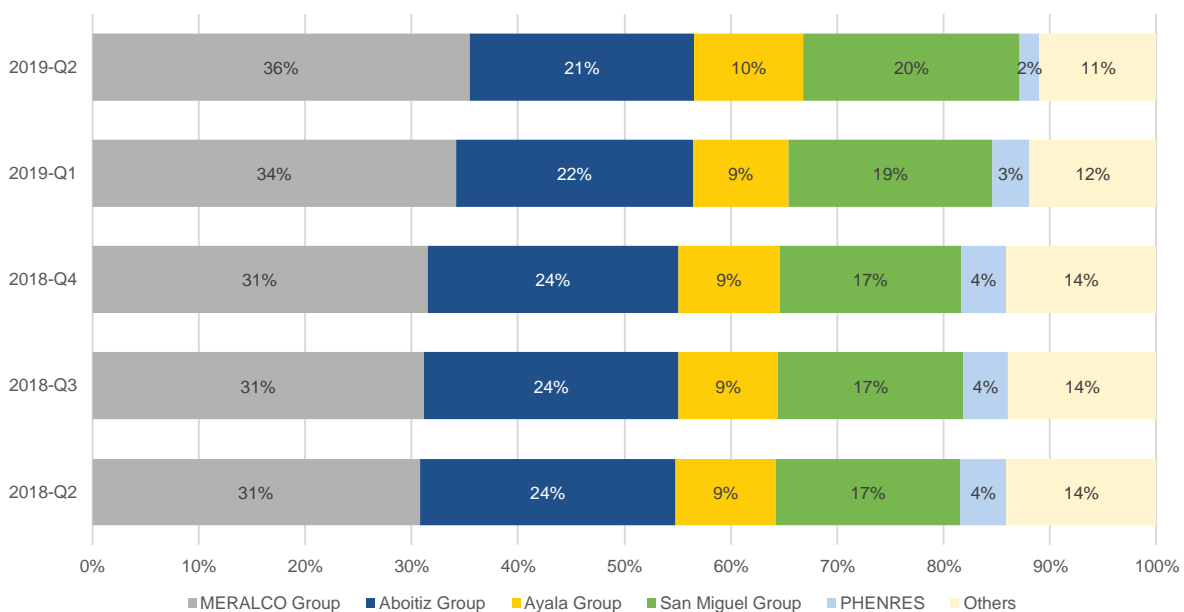


Figure 6. Share in Total Energy Consumption of CCs Per Major Participant, 2018-Q2 to 2019-Q2

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 ^b	National Grid Corporation of the Philippines

^b for the Directly Connected Contestable Customers

Majority or about 74 percent of the registered Contestable Customers were located within the franchise area of MERALCO as seen in **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 12 percent were scattered within the other distribution utility franchise areas and economic zones. Meanwhile, 8 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.

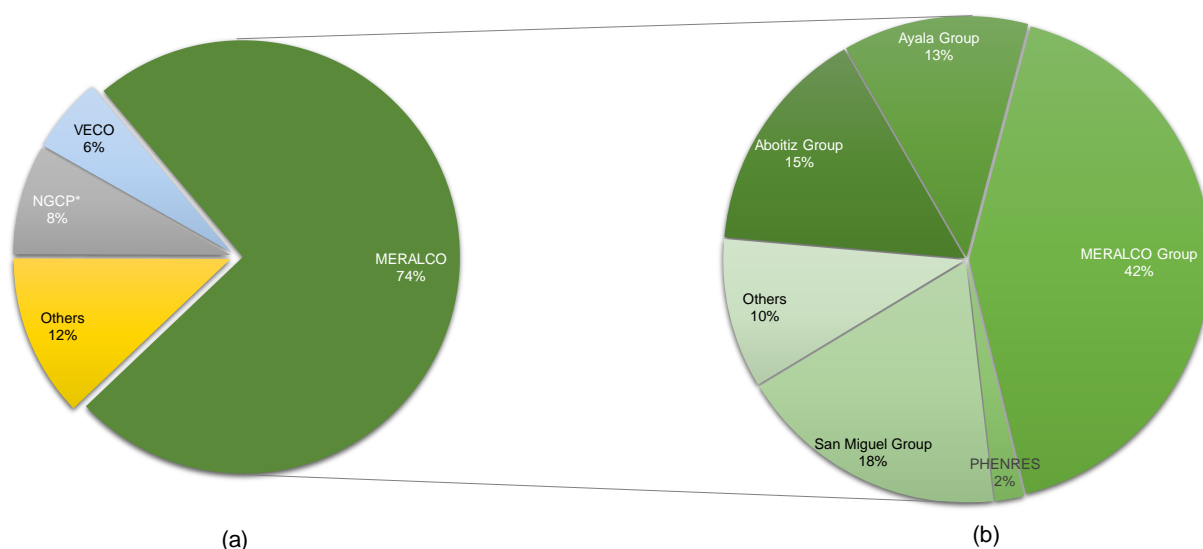


Figure 7. (a) Energy Consumption of CCs by Franchise Area, 2019-Q2; (b) Energy Consumption by Supplier within MERALCO Franchise Area, 2019-Q2

Within the MERALCO franchise area, 42 percent of the energy consumption of registered Contestable Customers was supplied by MRLCOLRE and its other affiliate suppliers, while the remaining 58 percent were supplied by other Retail Electricity Suppliers serving within the MERALCO franchise area as seen in **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 second quarter of 2018 to the second quarter of 2019 is shown in **Figure 8**. 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. Consistent with the discussion on Supplier Market Share in Section B, the HHI values based on the number of registered Contestable Customers and based on their consumption were observed to be significantly higher during the first and second quarters of 2019.

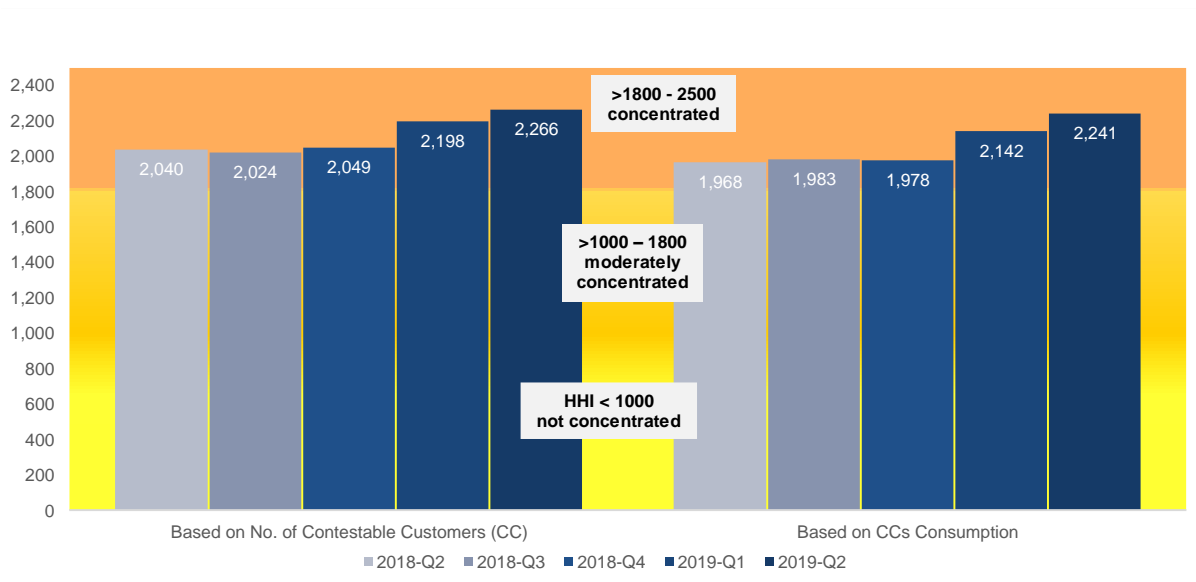


Figure 8. HHI Values Based on Number of CCs and CC Consumption, 2018-Q2 to 2019-Q2

3. Four-Firm Concentration Index (C4)⁴

The four-firm index or C4 values based both on the number of registered Contestable Customers and their consumption were still high at 87 to 88 percent during the quarter in review as shown in **Figure 9**. Note that the top four (4)

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
Greater than 1000 up to 1800 - moderately concentrated
Greater than 1800 up to 2500 - concentrated
Greater than 2500 - highly concentrated

⁴ C4 measures the percentage of market share of the four largest firms in the market.

Suppliers used in this index were determined based on the latest major participants grouping of the ERC.

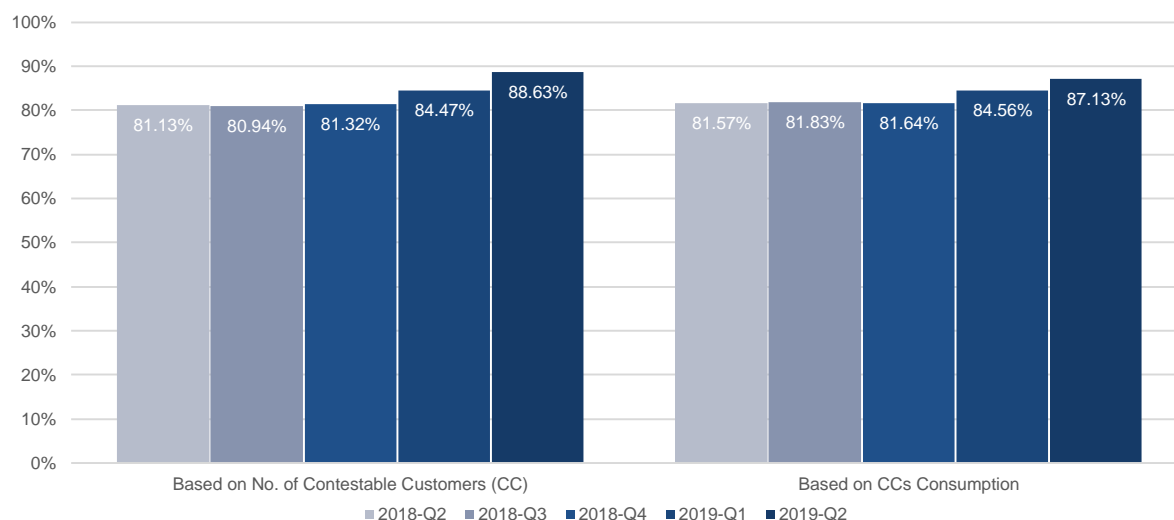


Figure 9. Four-Firm Index, 2018-Q2 to 2019-Q2

4. Supplier Structure

Table 6 shows the degree of integration among the Suppliers, Generation Companies, and Distribution Utilities as of June 2019⁵. 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	16	12
Local Retail Electricity Supplier	14	4	5	3
Supplier of Last Resort	25	5	7	4
Total	70	34	28	19

II. MARKET PERFORMANCE

A. Total Energy Consumption

⁵ Based on latest available ERC data.

The quarter-on-quarter total energy consumption from second quarter of 2018 to second quarter of 2019 is shown in **Figure 10**. The total energy consumption described in this section includes both that of the Captive⁶ and registered Contestable Customers. The energy consumption for the second quarter of 2019 was observed to be significantly higher than the same period of the previous year from about 20,326 GWh to about 22,242 GWh, translating to about 9 percent increase. Similarly, this quarter recorded a noticeable 21 percent increase in energy consumption from the previous quarter's consumption at 18,383 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.

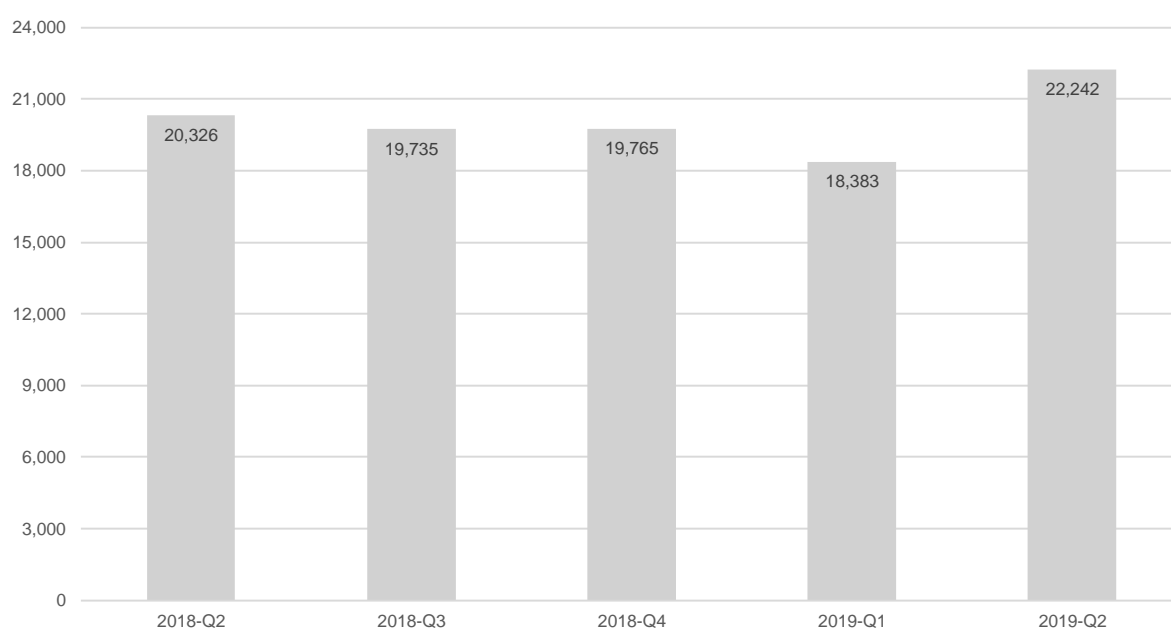


Figure 10. Total Energy Consumption (in GWh), 2018-Q2 to 2019-Q2

The monthly total energy consumption from April to June 2019 is shown in **Figure 11**. For the second quarter of 2019 alone, the highest energy consumption was recorded in June at about 7,697 GWh, while the lowest energy consumption was in April at 7,162 GWh.

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.

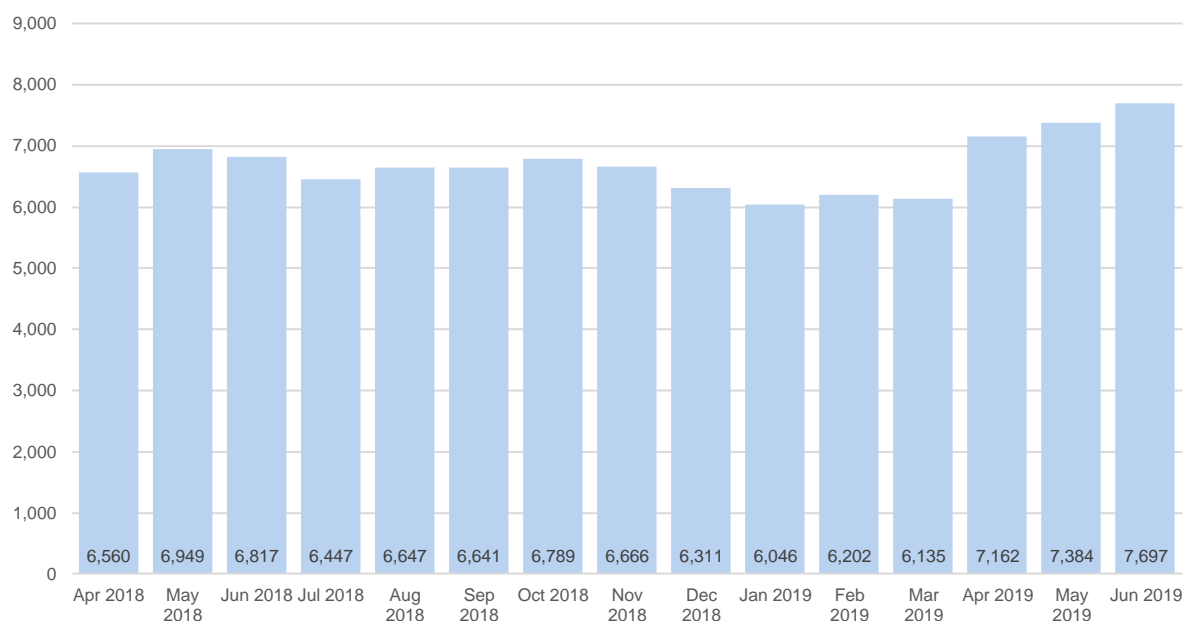


Figure 11. Monthly Total Energy Consumption (in GWh), 2018-Q2 to 2019-Q2

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 and the registered Contestable Customers.

In comparison with the previous quarter's 13,907 GWh, the energy consumption of Captive Customers for the second quarter of 2019 significantly increased to 17,282 GWh, translating to about 24 percent increase. Similarly, this was significantly higher when compared to the same period of the previous year which was recorded at 15,914 GWh.

On the other hand, consumption of registered Contestable Customers slightly increased from about 4,477 GWh in the previous quarter to about 4,960 GWh in the second quarter of 2019. This was slightly higher when compared to the same period of the previous year which was recorded at 4,412 GWh.

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

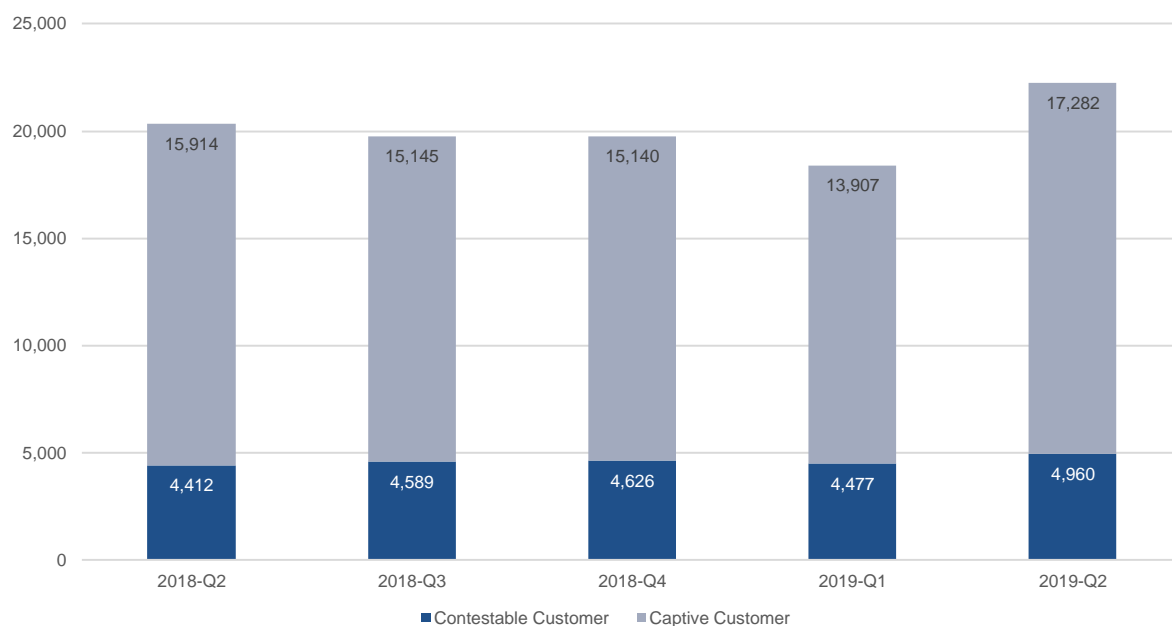


Figure 12. Total Energy Consumption (in GWh) Per Type of End-User, 2018-Q2 to 2019-Q2

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 24 percent share during the previous quarter, the share of the registered Contestable Customers again went back to about 22 percent during the second quarter of 2019, similar during the second quarter of the previous year. Such decrease may be attributable to several factors including the decreased demand for electricity by this type of end-users.

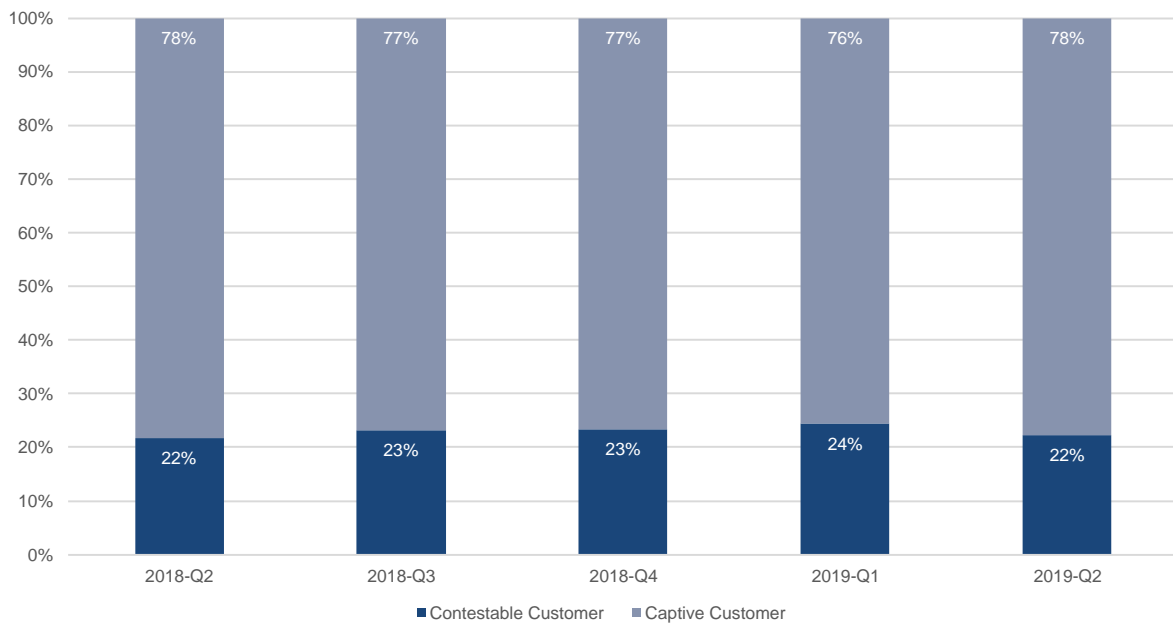


Figure 13. Share in Total Energy Consumption Per Type of End-User, 2018-Q1 to 2019-Q1

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 January to June 2019. The consumption profile demonstrated 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 variations. 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 second quarter of 2019, the highest hourly average energy consumption of registered industrial Contestable Customers was recorded in June 2019 at 0900H (about 1,505 MWh) while the lowest average energy consumption was noted in April 2019 at 1900H (about 1,335 MWh).

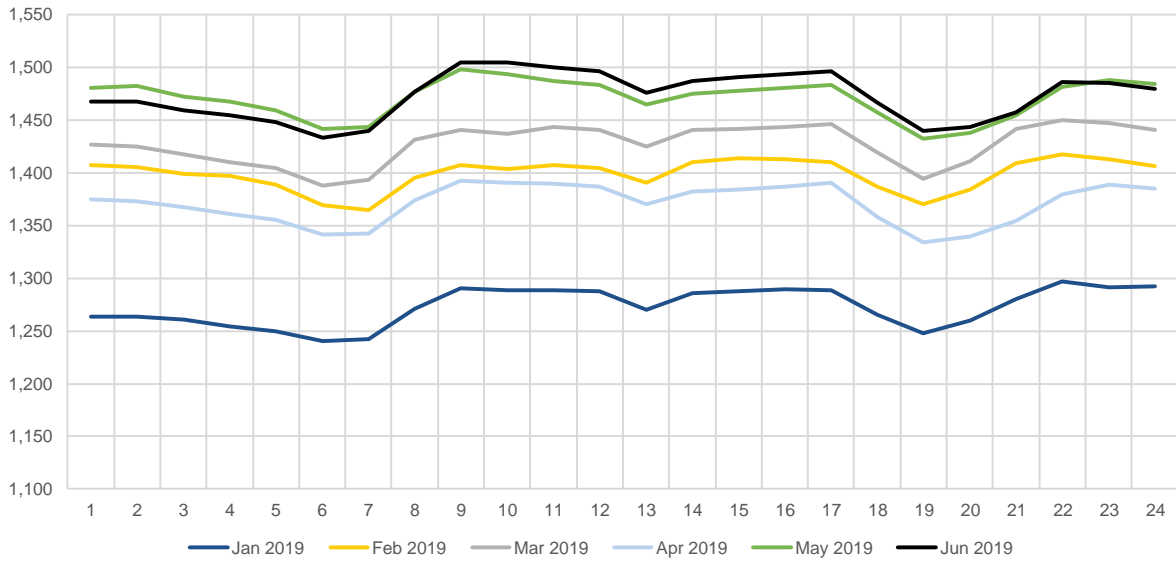


Figure 14. Hourly Average Energy Consumption (in MWh), Industrial CCs, Jan to Jun 2019

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 second quarter of 2019 was recorded in June 2019 at 1500H (about 1,196 MWh) while the lowest average energy consumption was noted in April 2019 at 0400H (about 427 MWh).

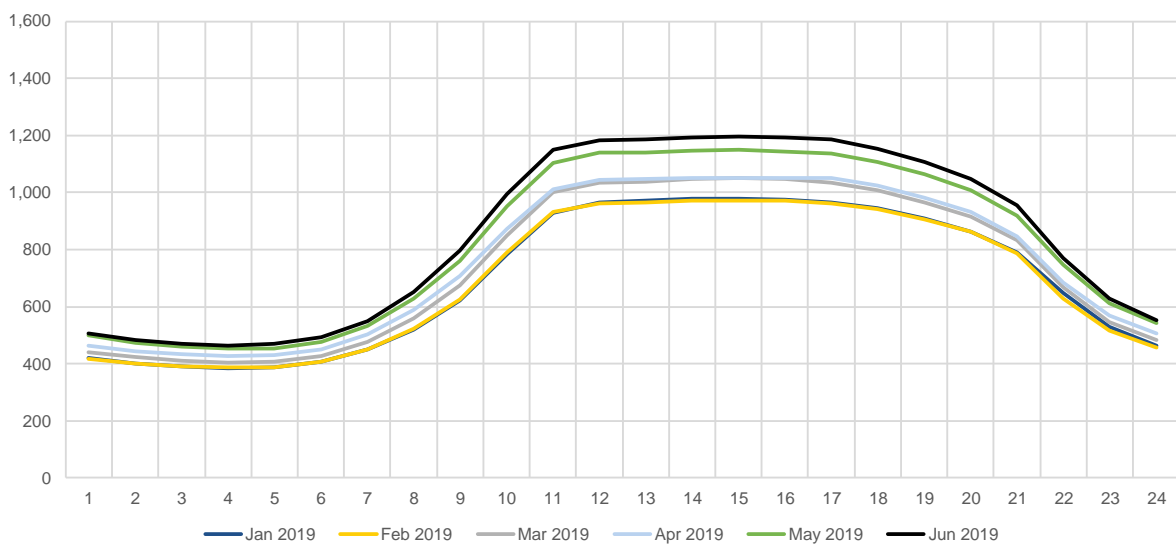


Figure 15. Hourly Average Energy Consumption (in MWh), Commercial CCs, Jan to Jun 2019

E. Load Factor

Figure 16 shows the monthly load factor⁷ 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 78 to 81 percent during the second quarter of 2019. By the end of June 2019, the load factor stood at 80.50 percent coming from 81.43 percent in March 2019.

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

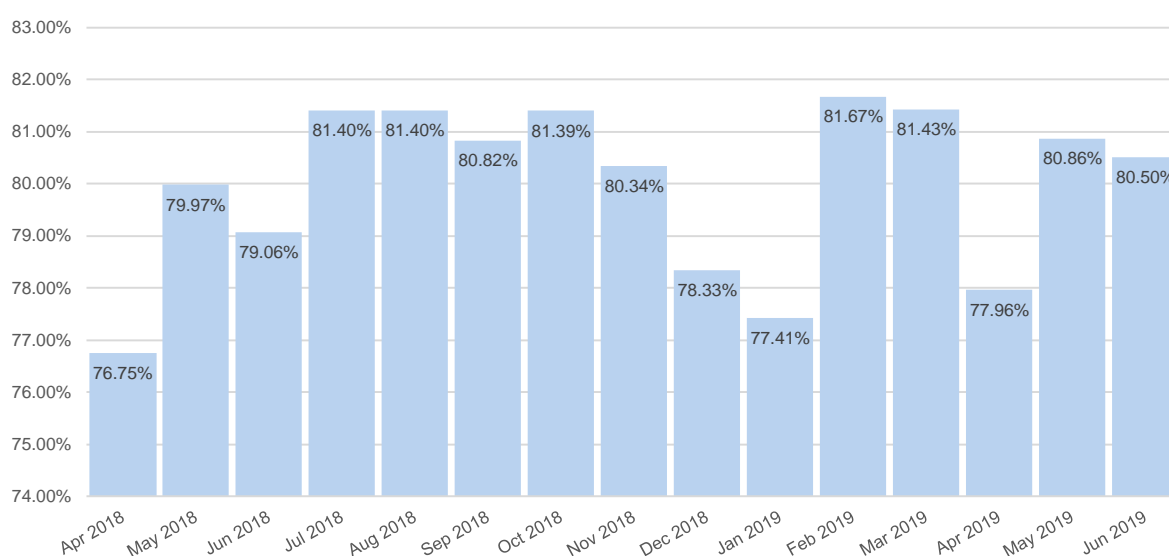


Figure 16. CC Load Factor, Jun 2018 to Jun 2019

III. RETAIL ACTIVITY

A. Customer Participation Level

The registered Contestable Customers in the commercial sector maintained its share of about 52 percent by the end of June 2019 billing month. The quarterly share of registered commercial and industrial Contestable Customers from end of June 2018 to end of June 2019 is shown in **Figure 17**.

⁷ Based on Metered Quantity (MQ)

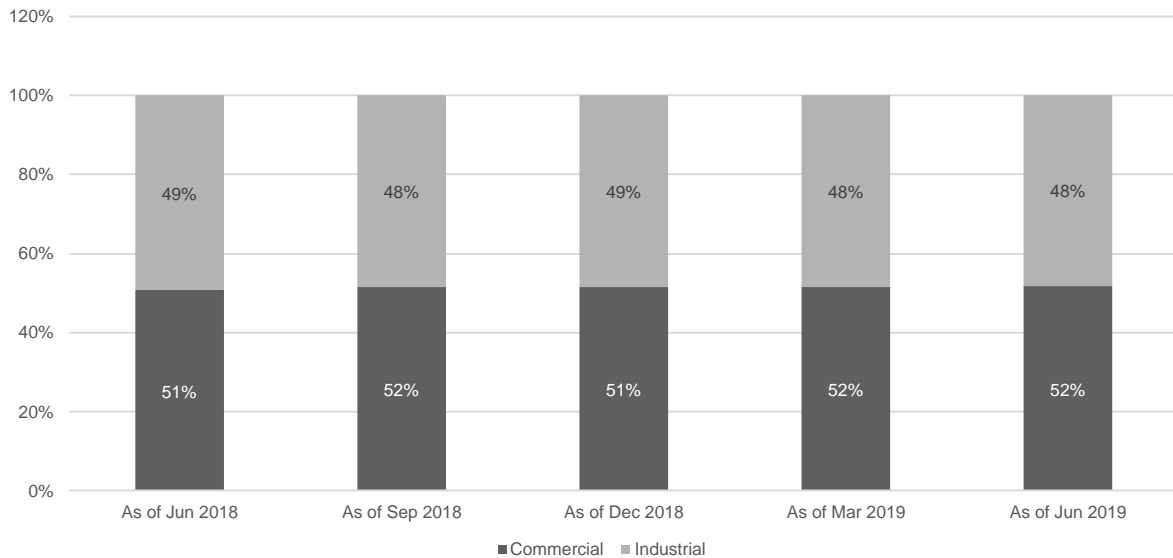


Figure 17. Percentage of CCs Per Industry Type, Jun 2018 to Jun 2019

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, sixteen (16) switches from one Supplier to another were recorded during the April to June 2019 billing months. Twelve (12) of the switches were from Retail Electricity Supplier to Retail Electricity Supplier, while three (3) of the switches were from Retail Electricity Supplier to Local Retail Electricity Supplier. Only one (1) Contestable Customer switched from Local Retail Electricity Supplier to Retail Electricity Supplier.

Table 7. Customer Switching Rate

Particulars	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019
Switching Rate (Luzon)	0.32%	0.11%	1.65%	0.10%	0.00%	0.19%	0.00%	0.28%	2.04%	0.64%	3.72%	0.54%	0.36%	0.00%	0.68%
Total No. of CCs	933	949	968	1,008	1,028	1,034	1,045	1,059	1,080	1,091	1,103	1,119	1,126	1,144	1,177
Total No. of CCs that Switched	3	1	16	1	0	2	0	3	22	7	41	6	4	0	8
LRES to LRES	1		2						4						1
RES to LRES			5					1	2	3	17	1			3
RES to RES	2	1	9	1		2		2	16	4	24	5	4		4
SOLR to RES															
Switching Rate (Visayas)	1.10%	0.00%	0.00%	1.04%	0.00%	0.97%	0.88%	0.00%	5.93%	5.08%	3.36%	0.83%	0.00%	0.00%	3.10%
Total No. of CCs	91	94	96	96	99	103	114	118	118	118	119	121	122	126	129
Total No. of CCs that Switched	1	0	0	1	0	1	1	0	7	6	4	1	0	0	4
LRES to LRES															
RES to LRES	1			1		1	1		7	6	4	1			4
RES to RES															
Switching Rate (Luzon-Visayas)	0.39%	0.10%	1.50%	0.18%	0.00%	0.26%	0.09%	0.25%	2.42%	1.08%	3.68%	0.56%	0.32%	0.00%	0.92%
Total No. of CCs	1,024	1,043	1,064	1,104	1,127	1,137	1,159	1,177	1,198	1,209	1,222	1,240	1,248	1,270	1,306
Total No. of CCs that Switched	4	1	16	2	0	3	1	3	29	13	45	7	4	0	12