MAG-ARMAR-2015

# ANNUAL RETAIL MARKET ASSESSMENT REPORT

26 December 2014 – 25 December 2015


**PHILIPPINE ELECTRICITY MARKET CORPORATION**

**MARKET ASSESSMENT GROUP (MAG)**

DISCLAIMER: The information contained in this document is based on the electricity spot market data that are subject to continuous verification by the Philippines Electricity Market Corporation (PEMC). The same information is subject to change as update figures come in. As such, the PEMC does not make any representations or warranties as to the completeness of this information. The PEMC, likewise accepts no responsibility or liability whatsoever for any loss or costs incurred by a reader arising from, or in relation to, any conclusions or assumptions derived from the information found herein.

# Table of Contents


**1. INTRODUCTION ..... 1**

**2. MARKET PERFORMANCE ..... 1**

2.1. Total Electricity Consumption ..... 1

2.2. Electricity Consumption by Type of End Users ..... 2

2.3. Percentage of Electricity Consumption by Type of End-User ..... 3

2.4. Contestable Customers' Hourly Electricity Consumption Profile ..... 4

2.5. Load Factor ..... 5

**3. MARKET STRUCTURE ..... 5**

3.1. Number of Players ..... 5

3.2. Market Share ..... 8

**4. RETAIL ACTIVITY ..... 14**

4.1. Customer Participation Level ..... 14

4.2. Customer Switching Rate ..... 15

4.3. Spot Exposure ..... 16

**5. CONCLUSION ..... 17**

## List of Figures


Figure 1. Monthly Electricity Consumption ........ 2
Figure 2. Monthly Electricity Consumption by Type of End Users, 2014-2015........ 3
Figure 3. Percentage of Electricity Consumption by End Users........ 4
Figure 4. Contestable Customers' Hourly Consumption Profile, 2015 ........ 4
Figure 5. Contestable Customers' Hourly Consumption Profile, 2014 ........ 5
Figure 6. Monthly Load Factor ........ 5
Figure 7. Share by Suppliers Based on No. of Registered Contestable Customers........ 9
Figure 8. Share by Suppliers Based on Contestable Customers' Consumption........ 10
Figure 9. No. of Contestable Customers by DU Franchise ........ 11
Figure 10. Contestable Customers' Consumption by DU Franchise ........ 12
Figure 11. Contestable Customers' Share to Total Consumption within MERALCO........ 12
Figure 12. HHI Based on Market Share by Supplier........ 13
Figure 13. Monthly Four-firm Concentration Index ........ 14
Figure 14. No. of Contestable Customers by Industry Type ........ 15
Figure 15. Spot Exposure by Supplier........ 16

**List of Tables**

Table 1. Average Energy Consumption .......... 2
Table 2. Percentage Change in Average Energy Consumption .......... 2
Table 3. Number of Contestable Customers .......... 6
Table 4. No. of Contestable Customers by Type of Membership .......... 7
Table 5. Number of Contestable Customers By Level of Maximum Energy Consumption .......... 7
Table 6. List of Suppliers .......... 8
Table 7. No. of Contestable Customers by Supplier .......... 9
Table 8. Number of Suppliers with Affiliate Generation Companies .......... 14
Table 9. Actual No. of Contestable Customers by Industry Type .......... 15
Table 10. Rate of Customer Switching .......... 15
Table 11. Customer Switching *List* .......... 16

# 1. INTRODUCTION

Following the Energy Regulatory Commission's (ERC) promulgation of the *Transitory Rules for the Initial Implementation of Open Access and Retail Competition* on 17 December 2012 and the Department of Energy's (DOE) issuance of DOE Circular No. DC2013-01-0002 "*Promulgating the Retail Rules for the Integration of RCOA in the WESM*" on 09 January 2013, the year 2013 marked the RCOA's commercial operation and its integration into the WESM. This allowed electricity end-users with monthly average peak demand of at least 1 MW for the preceding 12 months to have a supplier of their choice.

More than two years after the implementation of the retail market, the ERC already issued a Certificate of Contestability (COC) to a total of 1,057 Contestable Customers (CC) with an average peak demand of 1MW and above for the preceding twelve (12) months. By the end of 2015 billing year, the retail market recorded a total of 379 registered Contestable Customers, 17 Retail Electricity Suppliers (RES), 12 Local RES (LRES), and 6 Supplier of Last Resort (SOLR).

This Assessment Report on the Retail Electricity Market covering the billing period 26 December 2014 to 25 December 2015 discusses the results of monitoring indices, as set forth in the Catalogue of RCOA Monitoring Data and Indices. The report provides indications on how the retail market performed during the period in review and how it fared with the previous year's performance. It is important to note that the Contestable Customers being referred to in this report are only those registered in the market. Other Contestable Customers that have been issued with a Certificate of Contestability by the ERC but have yet to register in the market remain as Captive Customers.

While retail competition aims to promote competition, customer choice and empowerment, transparency, accountability and greater efficiency in the power industry, still, a large number of customers continue to be served by their respective Distribution Utilities (DU).

The DOE on 19 June 2015 issued its policy directive to facilitate the full implementation of RCOA targeted for 26 June 2016, through DOE Circular DC2015-06-0010, and was followed by a pronouncement from the ERC to comply with said timetable and to implement the lowering of threshold for contestability from 1 MW to 750 kw by the following year. It is hoped that with the targeted full implementation of RCOA, retail market will grow faster than it did in the last two years of its implementation.

# 2. MARKET PERFORMANCE

## 2.1. Total Electricity Consumption

The aggregate monthly electricity consumption in Luzon and Visayas regions for the 2014 and 2015 comparative billing periods is shown in Figure 1. Factors such as weather/temperature and seasonal changes as well as economic behaviour may well have played a role in the varying level of electricity consumption per month.

The total electricity consumption for 2015 was recorded at about 64,379 GWh, higher by 6 percent than in 2014, which was recorded at about 60,754 GWh. It is noteworthy from the monthly consumption profile shown in Figure 1 that electricity consumption was consistently higher in 2015 than in 2014 for the twelve-month period. Moreover, the highest electricity consumption was observed during the hot summer month of June and was, on the other hand, lowest in January billing period.

**Figure 1. Monthly Electricity Consumption**

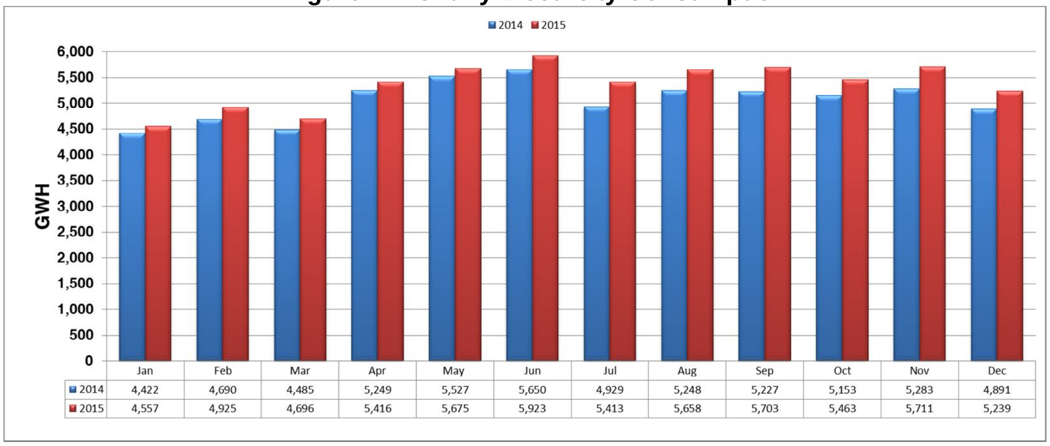



Table 1 and 2 show the comparative average electricity consumption and the percentage change in electricity consumption, respectively, for the relevant periods in review. It follows from the above discussion that the average electricity consumption was higher in 2015 than in 2014, from about 5,063 GWh to 5,365 GWh, respectively, translating to an almost 6 percent increase.

**Table 1. Average Energy Consumption**

| Category / Billing Period | Average Energy Consumption (GWH) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | | | | | | | 2015 | | | | | | |
| | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Sem | 2nd Sem | Annual | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Sem | 2nd Sem | Annual |
| Captive | 3,973.29 | 4,848.33 | 4,477.52 | 4,439.11 | 4,410.81 | 4,458.31 | 4,434.56 | 4,075.08 | 4,982.63 | 4,867.00 | 4,735.59 | 4,528.86 | 4,801.30 | 4,665.08 |
| Contestable | 559.18 | 627.02 | 657.21 | 669.73 | 593.10 | 663.47 | 628.28 | 650.62 | 688.75 | 724.27 | 735.66 | 669.68 | 729.96 | 699.82 |
| Total | 4,532.47 | 5,475.36 | 5,134.72 | 5,108.84 | 5,003.91 | 5,121.78 | 5,062.85 | 4,725.70 | 5,671.38 | 5,591.27 | 5,471.26 | 5,198.54 | 5,531.26 | 5,364.90 |

**Table 2. Percentage Change in Average Energy Consumption**

| Category / Billing Period | % Change in Average Energy Consumption | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Year-on-Year (by Quarter, by Semester) | | | | | | Quarterly 2015 | | | Semestral 2015 | Annual 2014-2015 |
| | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Sem | 2nd Sem | 1st-2nd Q | 2nd-3rd Q | 3rd-4th Q | | |
| Captive | 2.56% | 2.77% | 8.70% | 6.68% | 2.68% | 7.69% | 22.27% | -2.32% | -2.70% | 6.02% | 5.20% |
| Contestable | 16.35% | 9.84% | 10.20% | 9.84% | 12.91% | 10.02% | 5.86% | 5.16% | 1.57% | 9.00% | 11.39% |
| Total | 4.26% | 3.58% | 8.89% | 7.09% | 3.89% | 7.99% | 20.01% | -1.41% | -2.15% | 6.40% | 5.97% |

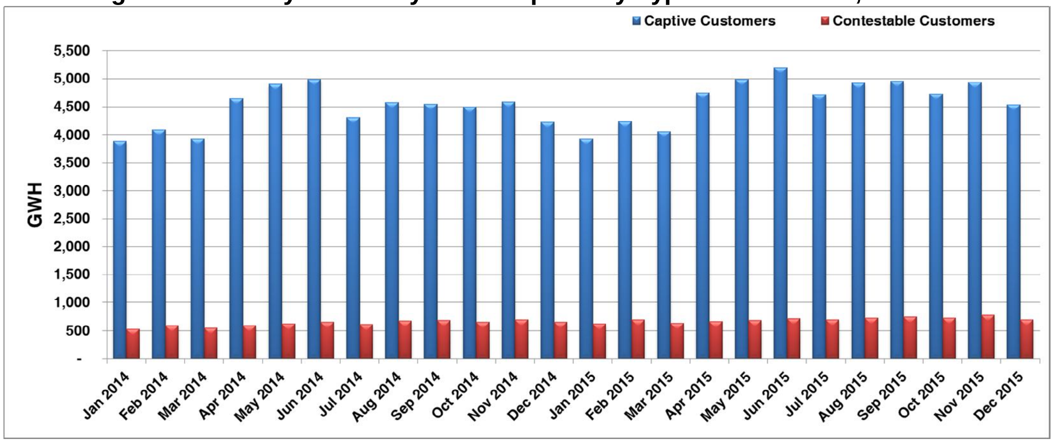
A review of the quarterly and semestral breakdown reveals that the pattern of average electricity consumption was the same for the two billing years in comparison.

As expected, during the 2015 billing year, an increase in total electricity consumption was observed moving towards the hot summer months of April to June, averaging 5,671 GWh from about 4,726GWh in the 1st quarter translating to about 20 percent increase. From this period until the end of the billing year, electricity consumption started to drop, which may be attributable to cooler weather that prevailed during the latter part of the year. The average electricity consumption in the fourth billing quarter was recorded at about 5,471 GWh.

## 2.2. Electricity Consumption by Type of End Users

Shown in Figure 2 is the monthly electricity consumption by type of end user, consisting of Contestable Customers that have registered in the retail market and Captive Customers.

**Figure 2. Monthly Electricity Consumption by Type of End Users, 2014-2015**




The monthly electricity consumption of the registered Contestable Customers for the 2015 billing year was consistently higher than in 2014 for the twelve-month period, ranging from 624 GWh to 774 GWh. On the average, the 2015 annual electricity consumption of registered Contestable Customers was about 700 GWh. This denotes about 11 percent increase from an average of about 628 GWh in 2014.

Consistent with the above discussion, the comparative average electricity consumption for all the four quarters and the two semesters denote higher electricity consumption for 2015 as compared with the previous billing year.

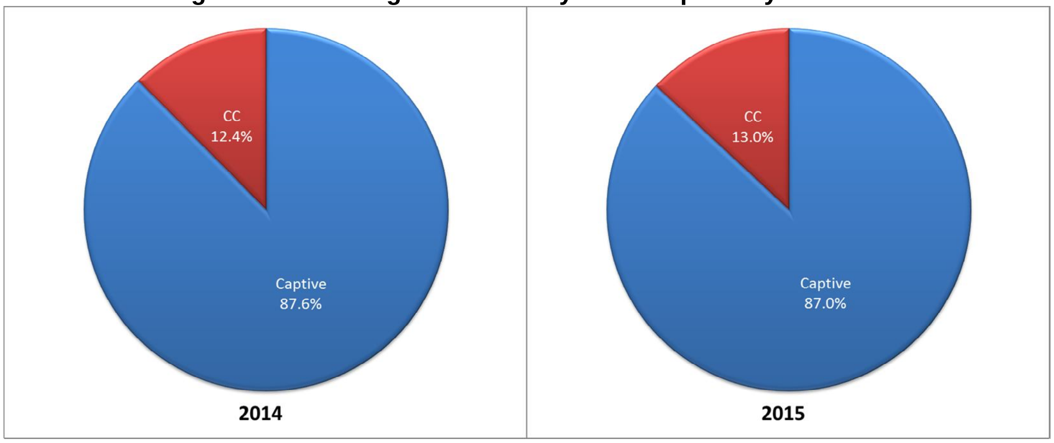
For the Captive Customers, it was observed that the monthly trend of electricity consumption followed that of total electricity consumption discussed in the preceding section, with a huge chunk in the total electricity consumption still under Captive Customers.

2.3. Percentage of Electricity Consumption by Type of End-User

While an increase in electricity consumption of registered Contestable Customers was observed in 2015, they held only a small percentage in the total electricity consumption, accounting for about 13 percent as shown in Figure 3. Year-on-year comparison, moreover, showed that the percentage share of Contestable Customers with respect to the total consumption based on WESM transactions increased at a very slow rate from about 12 percent share in 2014. This is consistent with the slow rate of increase in the number of Contestable Customers that have registered in the market. The succeeding section on market structure, particularly on the number of Contestable Customers that have registered in the market, may well explain such low aggregate consumption level of registered Contestable Customers.

As discussed in the previous section, the share of Captive Customers accounted for a very huge chunk, about 87 percent, in the total electricity consumption.

**Figure 3. Percentage of Electricity Consumption by End Users**




2.4. Contestable Customers' Hourly Electricity Consumption Profile

Figures 4 and 5 show the Contestable Customers' hourly consumption profile for each billing month in 2015 and 2014, respectively, demonstrating how their electricity consumption varied over the course of a 24-hour period.

No substantial peak and off-peak variation in the hourly consumption profile was observed. The consumption profile likewise denoted that regardless of the seasonal changes and varying temperatures throughout the year, the pattern of electricity during the course of a day was approximately the same for all the 2015 billing months, except for November and December where a slight change in the pattern of consumption was observed, which may be attributable to increased number of Contestable Customers and consumption of individual Contestable Customers.

Notably, hourly consumption based on Figures 4 and 5 increased from their previous level in 2014.

**Figure 4. Contestable Customers' Hourly Consumption Profile, 2015**

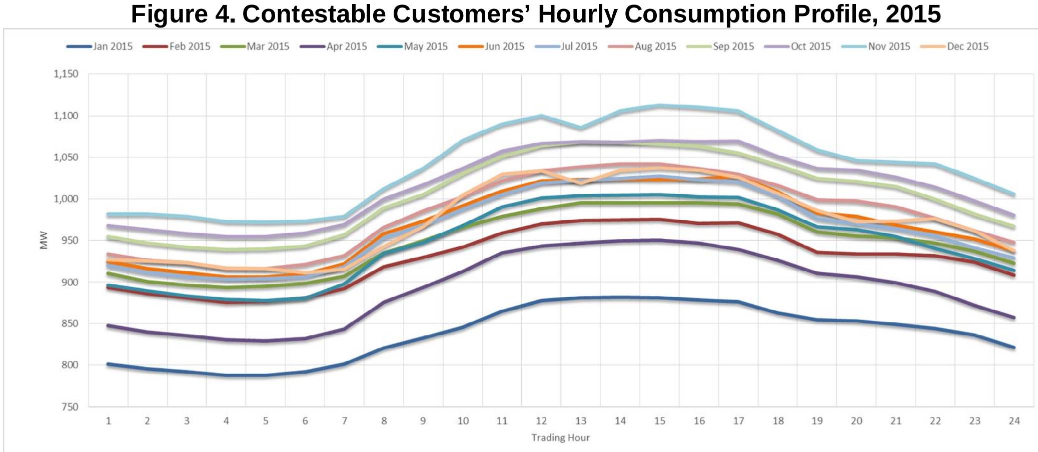
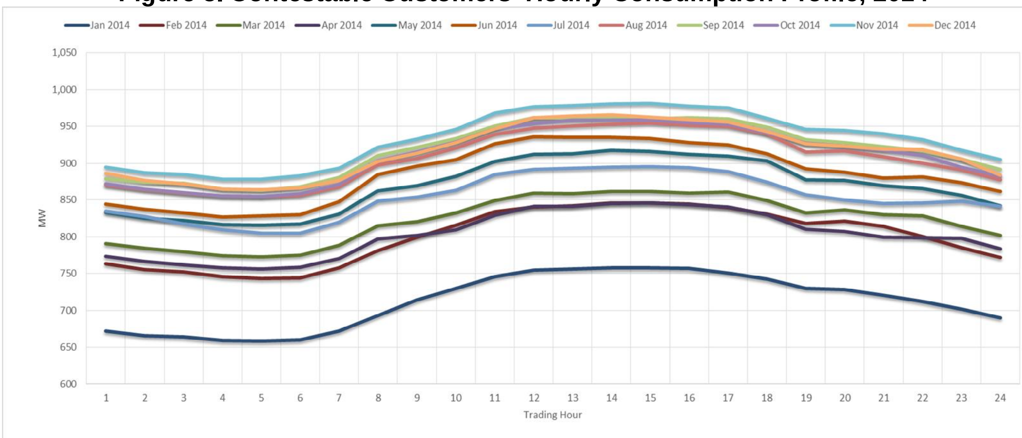


**Figure 5. Contestable Customers' Hourly Consumption Profile, 2014**

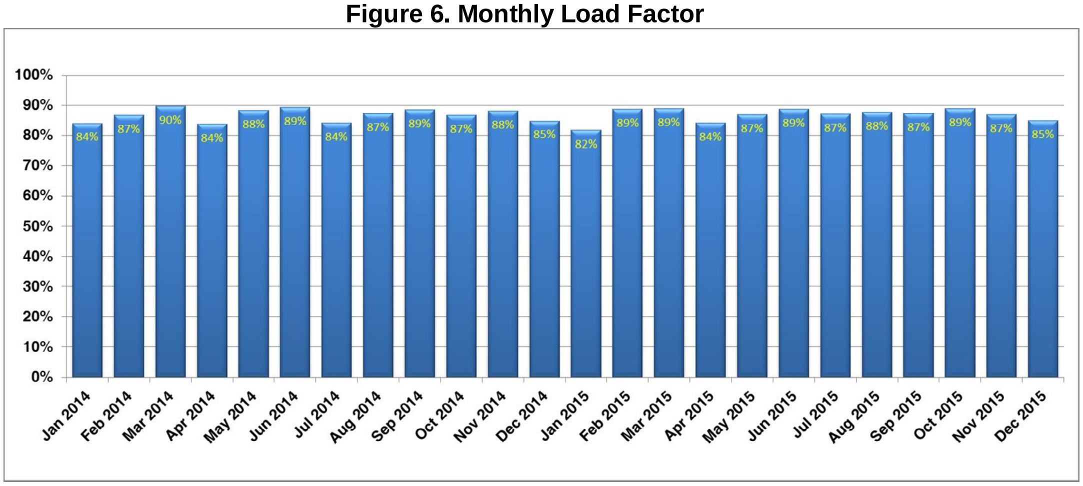



2.5. Load Factor

Consequently, the monthly load factor of the registered Contestable Customers was maintained relatively high throughout the period in review, ranging from 82 percent to 89 percent for the year 2015 as shown in Figure 6**.** This is more or less consistent with the monthly load factor in the previous billing year, ranging from 84 percent to 89 percent. It is important to note that load factor is calculated based on the actual electricity consumption of the registered Contestable Customers.

No significant month-on-month changes were observed in the load factor of the registered Contestable Customers within the 2015 billing year, except for the January to February period, with a jump from 82 percent to 89 percent load factor, respectively.

**Figure 6. Monthly Load Factor**




## 3. MARKET STRUCTURE

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

3.1. Number of Players

3.1.1. Number of Contestable Customers

The number of registered Contestable Customers increased by about 5 percent in 2015. This number was observed to be on an increasing trend looking at the data from 2013. However, more than two years after its integration into the WESM, the size of the retail market vis-à-vis the number of Contestable Customers already issued with a Certificate of Contestability by the ERC remains small.

The 240 Contestable Customers that initially registered in July 2013 increased to 360 by December 2014 billing period. As shown in Table 3, by the end of December 2015 billing period, the retail market had a total of 379 registered Contestable Customers, of which, 375 came from Luzon and 4 from Visayas. Of the total registered Contestable Customers, 7 are directly connected, 5 of which from Luzon and 2 from Visayas.

**Table 3. Number of Contestable Customers**

| Region / Membership Category | No. of Contestable Cutomers (CCs) as of Billing Quarter | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2014 | | | | 2015 | | | |
| | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Q | 2nd Q | 3rd Q | 4th Q |
| **Luzon** | **316** | **326** | **345** | **357** | **361** | **365** | **374** | **375** |
| *CC* | *313* | *323* | *342* | *354* | *356* | *360* | *369* | *370* |
| *DCU* | *3* | *3* | *3* | *3* | *5* | *5* | *5* | *5* |
| **Visayas** | **1** | **2** | **3** | **3** | **3** | **3** | **3** | **4** |
| *CC* | | *1* | *1* | *1* | *1* | *1* | *1* | *2* |
| *DCU* | *1* | *1* | *2* | *2* | *2* | *2* | *2* | *2* |
| **TOTAL** | **317** | **328** | **348** | **360** | **364** | **368** | **377** | **379** |
| ***New*** | ***54*** | ***11*** | ***20*** | ***13*** | ***5*** | ***4*** | ***9*** | ***2*** |
| ***Deregistered*** | ***-*** | ***-*** | ***-*** | ***1*** | ***1*** | ***-*** | ***-*** | ***-*** |
| **Increase/ Decrease Q-on-Q** | | **11** | **20** | **12** | **4** | **4** | **9** | **2** |
| **% Increase Q-on-Q** | | **3.47%** | **6.10%** | **3.45%** | **1.11%** | **1.10%** | **2.45%** | **0.53%** |
| **Increase/ Decrease Y-on-Y** | | | | | **47** | **40** | **29** | **19** |
| **% Increase Y-on-Y** | | | | | **14.83%** | **12.20%** | **8.33%** | **5.28%** |

The number of registered Contestable Customers remained as a small percentage, about 36 percent, of the total number of Contestable Customers already issued with a Certificate of Contestability. Based on the ERC's data as of December 2015, a total of 1,057 Contestable Customers (those with 1MW and above average peak demand) were already issued a Certificate of Contestability. Of this number, 928 came from Luzon and 129 from Visayas. Still, majority of the Contestable Customers that have been issued with a Certificate of Contestability continue to be served by their respective Distribution Utilities and have yet to register in the retail market.

Table 4 below provides a breakdown of the number of Contestable Customers by membership type, whether Direct or Indirect WESM member. As of December 2015 billing period, 3 of the 379 registered Contestable Customers were registered as Direct WESM members. It should be noted that the calculation of market share by Supplier, which will be discussed in the succeeding section, excludes the Contestable Customers that are Direct WESM members, as their transactions are settled directly in the market and not through their respective Suppliers.

**Table 4. No. of Contestable Customers by Type of Membership**

| Region / Membership Type | No. of Contestable Cutomers (CCs) as of Billing Quarter | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2014 | | | | 2015 | | | |
| | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Q | 2nd Q | 3rd Q | 4th Q |
| **Luzon** | **316** | **326** | **345** | **357** | **361** | **365** | **374** | **375** |
| *Indirect* | *316* | *326* | *345* | *357* | *360* | *364* | *373* | *374* |
| *Direct* | | | | | *1* | *1* | *1* | *1* |
| **Visayas** | **1** | **2** | **3** | **3** | **3** | **3** | **3** | **4** |
| *Indirect* | | *1* | *1* | *1* | *1* | *1* | *1* | *2* |
| *Direct* | *1* | *1* | *2* | *2* | *2* | *2* | *2* | *2* |
| **TOTAL** | **317** | **328** | **348** | **360** | **364** | **368** | **377** | **379** |

As shown in Table 5, about 82 percent of the Contestable Customers registered in the market had maximum energy consumption of 5 MWH and below, while about 13 percent had consumption ranging from 5 MWH to 10 MWH. The remaining 5 percent of all registered Contestable Customers had maximum energy consumption of 10 MWH and above.

**Table 5. Number of Contestable Customers By Level of Maximum Energy Consumption**

| Region | No. of CCs by Level of Maximum Energy Consumption | | | | | |
|---|---|---|---|---|---|---|
| | 5 MWH and Below | 5 MWH to 10 MWH | 10 MWH to 15 MWH | 15 MWH to 20 MWH | Above 20 MWH | Total |
| **LUZON** | 307 | 50 | 9 | 2 | 7 | 375 |
| **VISAYAS** | 2 | 1 | | | 1 | 4 |
| **Total** | **309** | **51** | **9** | **2** | **8** | **379** |
| **% Share to Total** | **81.53%** | **13.46%** | **2.37%** | **0.53%** | **2.11%** | **100.00%** |

3.1.2. Number of Suppliers

Table 6 shows the list of registered Suppliers comprising of 17 Retail Electricity Suppliers (RES), 12 Local Retail Electricity Suppliers (LRES), and 6 Supplier of Last Resort (SOLR) from Luzon and Visayas regions combined.

During the period in review, there were 3 additional Suppliers recorded, one from each of the 3 Supplier categories, namely: WAHCRES, INECLRE, and INECSOLR.

**Table 6. List of Suppliers**

| No. | Market Participant Name | Short Name | Category | Region Served |
|---|---|---|---|---|
| 17 | AdventEnergy, Inc. | ADVENTRES | Retail Electricity Supplier | Luzon/Visayas |
| | Aboitiz Energy Solutions, Inc. | AESIRES | | Luzon/Visayas |
| | DirectPower Services, Inc. | DIRPOWRES | | Luzon/Visayas |
| | Ecozone Power Management, Inc. | EPMIRES | | Luzon/Visayas |
| | First Gen Energy Solutions, Inc. | FGESRES | | Luzon/Visayas |
| | Global Energy Supply Corporation | GESCRES | | Luzon/Visayas |
| | GNPower Ltd. Co. | GNPLCRES | | Luzon/Visayas |
| | GNPower Mariveles Coal Plant Ltd. Co. | GNPRES | | Luzon/Visayas |
| | Kratos RES, Inc. | KRATOSRES | | Luzon/Visayas |
| | Masinloc Power Partners Company Limited | MPPCLRES | | Luzon/Visayas |
| | Premier Energy Resources Corporation | PERCRES | | Luzon/Visayas |
| | Prism Energy, Inc. | PRISMRES | | Luzon/Visayas |
| | San Miguel Electric Corporation | SMELCRES | | Luzon/Visayas |
| | SN Aboitiz Power-RES, Inc. | SNAPRES | | Luzon/Visayas |
| | Trans-Asia Oil & Energy Development Corporation | TAORES | | Luzon/Visayas |
| | TeaM (Philippines) Energy Corporation | TPECRES | | Luzon/Visayas |
| | Waterfront Mactan Casino Hotel, Inc. | WAHCRES | | Visayas |
| 12 | Batangas II Electric Cooperative, Inc. | BTLC2LRE | Local Retail Electricity Supplier | Luzon |
| | Camarines Sur II Electric Cooperative, Inc. | CASUR2LRE | | Luzon |
| | Dagupan Electric Corporation | DECORPLRE | | Luzon |
| | Ilocos Norte Electric Cooperative, Inc. | INECLRE | | Luzon |
| | Manila Electric Company | MRLCOLRE | | Luzon |
| | San Fernando Electric Light & Power Co., Inc. | SFELAPLRE | | Luzon |
| | Subic Enerzone Corporation | SEZLRE | | Luzon |
| | Tarlac Electric, Inc. | TEILRE | | Luzon |
| | Cebu I Electric Cooperative, Inc. | CEBEC1LRE | | Visayas |
| | Cebu II Electric Cooperative, Inc. | CEBEC2LRE | | Visayas |
| | Central Negros Electric Cooperative, Inc. | CENECOLRE | | Visayas |
| | Visayan Electric Company, Inc. | VECOLRE | | Visayas |
| 6 | Batangas II Electric Cooperative, Inc. | BTLC2SLR | Supplier of Last Resort | Luzon |
| | Camarines Sur II Electric Cooperative, Inc. | CASUR2SLR | | Luzon |
| | Dagupan Electric Corporation | DECORPSLR | | Luzon |
| | Manila Electric Company | MRLCOSLR | | Luzon |
| | Ilocos Norte Electric Cooperative, Inc. | INECSLR | | Luzon |
| | Cebu I Electric Cooperative, Inc. | CEBEC1SLR | | Visayas |

## 3.2. Market Share

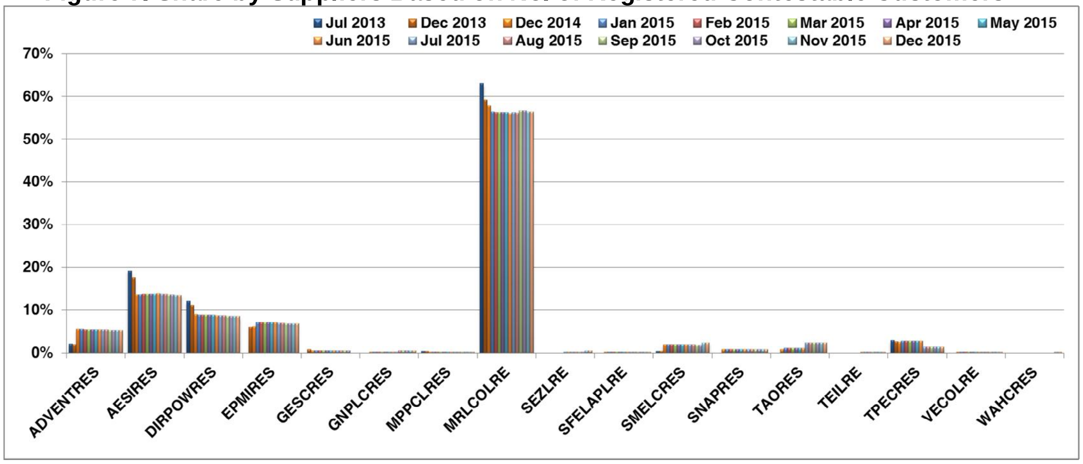
### 3.2.1. Market Share of Supplier[1]

Shown in Figure 7 is the percentage share of each Supplier vis-a-vis the total number of registered Contestable Customers for the relevant billing periods. The figures reveal that MRLCOLRE consistently supplied the electricity requirements of majority of the registered Contestable Customers throughout the period in review.

Noteworthy was that the ranking of the top 5 Suppliers in terms of the number of Contestable Customers served was the same for the 2014 and 2015 billing years. The top 5 Suppliers were: (1) MRLCOLRE, (2) AESIRES, (3) DIRPOWRES, (4) EPMIRES, and (5) ADVENTRES. Likewise notable was that 4 of them showed a decreased share vis-à-vis the total number of Contestable Customers. Only EPMIRES increased its share by the end of the 2015 billing year.

[1] Calculation of market share by Suppliers does not include registered Contestable Customers that are direct WESM members.

**Figure 7. Share by Suppliers Based on No. of Registered Contestable Customers**




By the end of December 2015 billing period, the share of MRLCOLRE in the number of Contestable Customers accounted for 56 percent of all registered Contestable Customers that are Direct WESM members. This, however, was lower by almost 2 percent than its 58 percent share in the same period of the previous billing year.

MRLCOLRE was distantly followed by AESIRES and DIRPOWRES, with shares of about 14 percent and 9 percent of all registered Contestable Customers, respectively, same as their shares in December 2014 billing period.

Moreover, EPMIRES had a 7 percent share in the number of Contestable Customers by the end of December 2015 billing period, higher than its 6 percent share in the same period of the previous billing year. ADVENTRES, on the other hand, had 5 percent share, lower than its 6 percent share in December 2014 billing period.

**Table 7. No. of Contestable Customers by Supplier**

| Supplier Name | No. of CCs by Supplier as of Billing Quarter | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2014 | | | | 2015 | | | |
| | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Q | 2nd Q | 3rd Q | 4th Q |
| ADVENTRES | 9 | 9 | 20 | 20 | 20 | 20 | 20 | 20 |
| AESIRES | 50 | 51 | 41 | 49 | 50 | 51 | 51 | 51 |
| DIRPOWRES | 31 | 31 | 32 | 32 | 32 | 32 | 32 | 32 |
| EPMIRES | 21 | 22 | 22 | 22 | 26 | 26 | 26 | 26 |
| GESCRES | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| GNPLCRES | | | | 1 | 1 | 1 | 2 | 2 |
| MPPCLRES | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MRLCOLRE | 183 | 190 | 203 | 207 | 203 | 204 | 212 | 212 |
| SEZLRE | | | | | | 1 | 1 | 2 |
| SFELAPLRE | | | 1 | 1 | 1 | 1 | 1 | 1 |
| SMELCRES | 6 | 6 | 8 | 7 | 7 | 7 | 7 | 9 |
| SNAPRES | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| TAORES | 2 | 2 | 3 | 3 | 4 | 4 | 9 | 9 |
| TEILRE | | | | | | 1 | 1 | 1 |
| TPECRES | 10 | 10 | 10 | 9 | 10 | 10 | 5 | 5 |
| VECOLRE | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| WAHCRES | | | | | | | | 1 |
| **Total** | **316** | **327** | **346** | **358** | **361** | **365** | **374** | **376** |

Table 7 above shows the actual number of Contestable Customers served by each Supplier. By the end of December 2015 billing period, the number of Contestable Customers served by MRLCOLRE increased by 5 from 207 Contestable Customers at the end of the December 2014 billing period, denoting a 2 percent increase. It was noted that the number of Contestable Customers served by MRLCOLRE increased significantly by around 40 percent from only 151 Contestable Customers at the start of its participation in the retail market to December 2015.

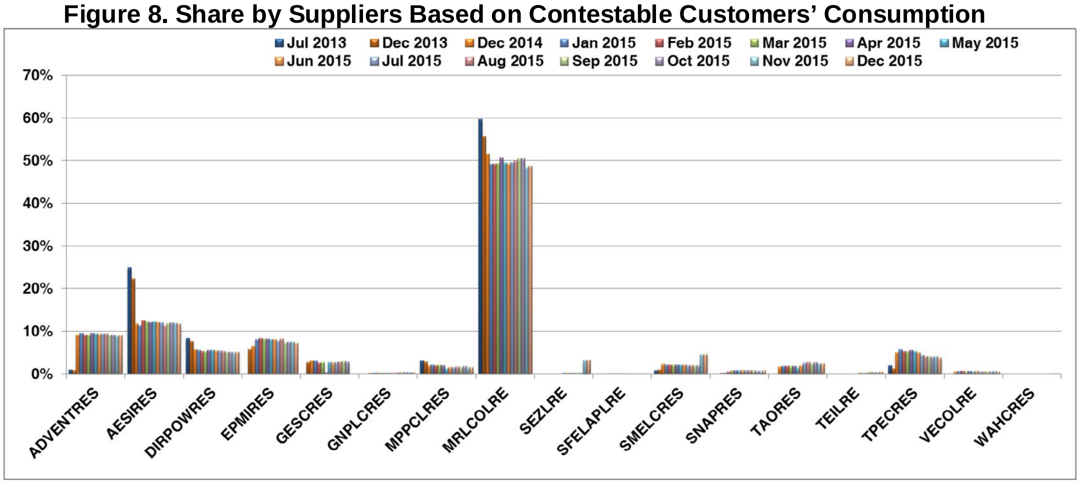
Similarly, AESIRES' number of Contestable Customers increased but at a much slower rate, from 49 in December 2014 to 51 Contestable Customers by the end of December 2015 billing period, translating to a 4 percent increase. If compared with its 46 Contestable Customers in July 2013, its 2015 level grew by about 11 percent.

On the other hand, the number of Contestable Customers under DIRPOWRES remained flat, with no addition to the 32 Contestable Customers it had at the end of December 2014 billing period. Moreover, DIRPOWRES had only 3 additional Contestable Customers from 29 in July 2013, which translates to a 10 percent increase.

EPMIRES increased its number of Contestable Customers by 38 percent from 16 recorded at the end of December 2013 to 22 Contestable Customers at the end of December 2014 billing period. Further, EPMIRES increased its number of Contestable Customers to 26 by the end December 2015 billing month, translating to 63 percent and 18 percent increases if compared with its previous number of Contestable Customers in December 2013 and December 2014, respectively. In the same manner, ADVENTRES increased its number of Contestable Customers from 5 in July 2013 (and December 2013) to 20 Contestable Customers in December 2014, translating to a 300 percent increase. Its number of Contestable Customers, however, was maintained and did not move until December 2015.

In terms of Supplier share in the electricity consumption of Contestable Customers, as depicted in Figure 8, a huge chunk was evidently supplied by MRLCOLRE for both 2014 and 2015 billing years. It was observed, however, that MRLCOLRE's share in the electricity consumption of Contestable Customers was on a decreasing trend from the start of the RCOA operations, with about 60 percent share in July 2013, dropping to 56 percent by the end of December 2013, and further to 52 percent by December 2014. By the end of December 2015 billing period, MRLCOLRE's share was recorded at 49 percent.

**Figure 8. Share by Suppliers Based on Contestable Customers' Consumption**

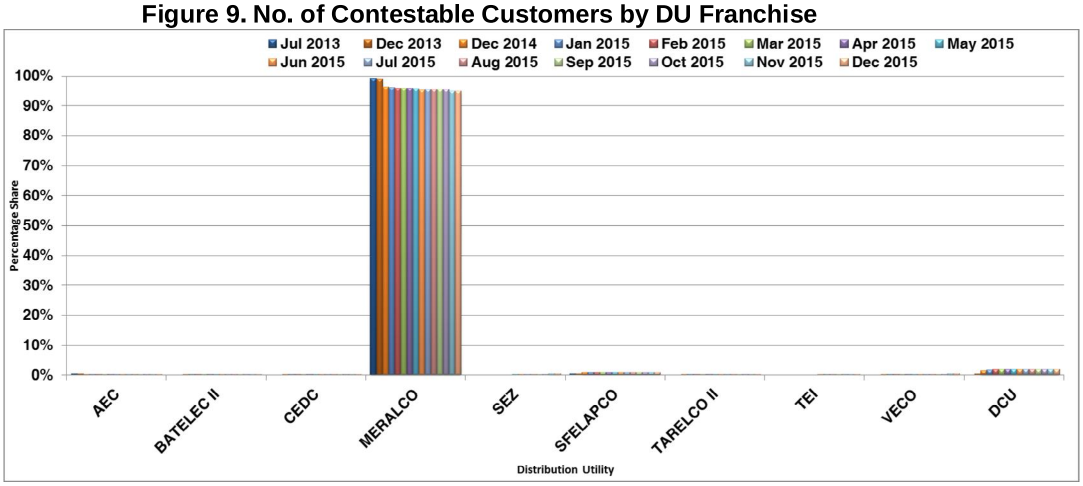


Consistent with the preceding discussions, MRLCOLRE still controlled half of the market share in terms of electricity consumption of the registered Contestable Customers during the 2015 billing year, as shown in Figure 8. On the average, it posted about 50 percent share in the total consumption of Contestable Customers in 2015, which is only slightly lower than its 51 percent average share during the 2014 billing year.

Among other things, MRLCOLRE's market share may have been affected by additional suppliers participating in the retail market and the switching that took place from MRLCOLRE to other suppliers. In the year 2015 for instance, 5 of MRLCOLRES' Contestable Customers switched to other suppliers.

Figure 9 below shows the market share calculations by franchise area of Distribution Utilities.[2] The figures for 2015 showed that majority of the Contestable Customers that registered in the market throughout the covered period were located within the franchise area of MERALCO. This does not automatically mean, however, that the MERALCO served as the RES of these Contestable Customers.

**Figure 9. No. of Contestable Customers by DU Franchise**

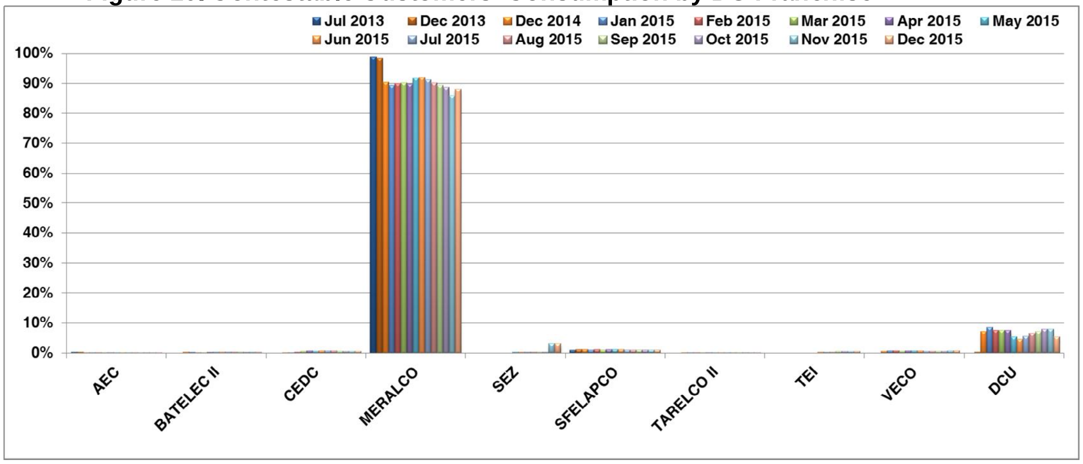



On the other hand, based on the 2015 data, only 3 Contestable Customers were identified within San Fernando Electric Light and Power Company, Inc. (SFELAPCO). The rest of Contestable Customers were scattered among the following Distribution Utility franchise area: Angeles Electric Corporation (AEC); Batangas II Electric Cooperative, Inc. (BATELEC II); Clark Electric Distribution Corporation (CEDC); Subic Enerzone Corporation (SEZ); Tarlac Electric, Inc. (TEI); Tarlac II Electric Cooperative, Inc. (TARELCO II); and Visayan Electric Company (VECO). Of the 379 registered Contestable Customers recorded by the end of the December 2015 billing period, 7 are directly connected to the transmission grid.

Figure 10 below shows the corresponding electricity consumption of Contestable Customers under each of the Distribution Utility franchise area.

[2] Calculation of market share by franchise are of Distribution Utilities include registered Contestable Customers that are direct WESM members. The figures denote share by location and does not automatically mean that the DU served as the RES of the Contestable Customers within its franchise area.

**Figure 10. Contestable Customers' Consumption by DU Franchise**

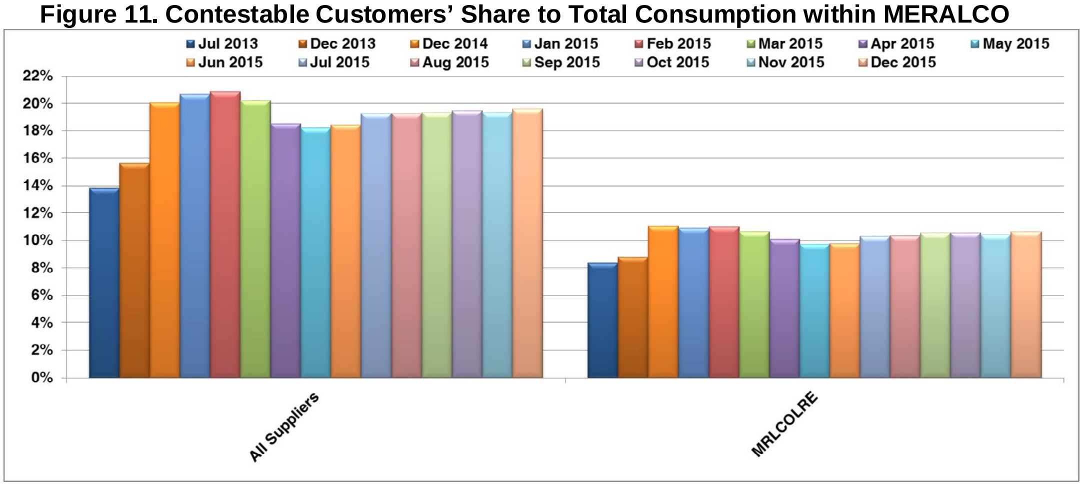



By the end of the December 2015 billing period, the share by MERALCO franchise in total energy consumption was recorded at about 88 percent, lower than its share by end of December 2014 at about 90 percent.

On the average, the MERALCO franchise area accounted for about 90 percent of the total consumption of all registered Contestable Customers, which is slightly lower than its 92 percent average share during the 2014 billing year. On the other hand, directly-connected Contestable Customers posted an average share of about 7 percent in 2015, slightly higher than its 6 percent average share in the previous billing year. The remaining share in electricity consumption by Contestable Customers were under the franchise area of the following Distribution Utilities: AEC, BATELEC II, CEDC, SEZ, SFEPALCO, TARELCO II, TEI, and VECO.

Further breaking down the consumption of registered Contestable Customers within the MERALCO franchise area, as depicted in Figure 11 below, it can be noted that by the end of December 2015 billing period, the registered Contestable Customers posted only about 20 percent of the total consumption within MERALCO, 11 percent of which were supplied by the local RES of MERALCO, while the other 9 percent by other suppliers. The remaining 80 percent accounted for the electricity consumption of Captive Customers.

**Figure 11. Contestable Customers' Share to Total Consumption within MERALCO**

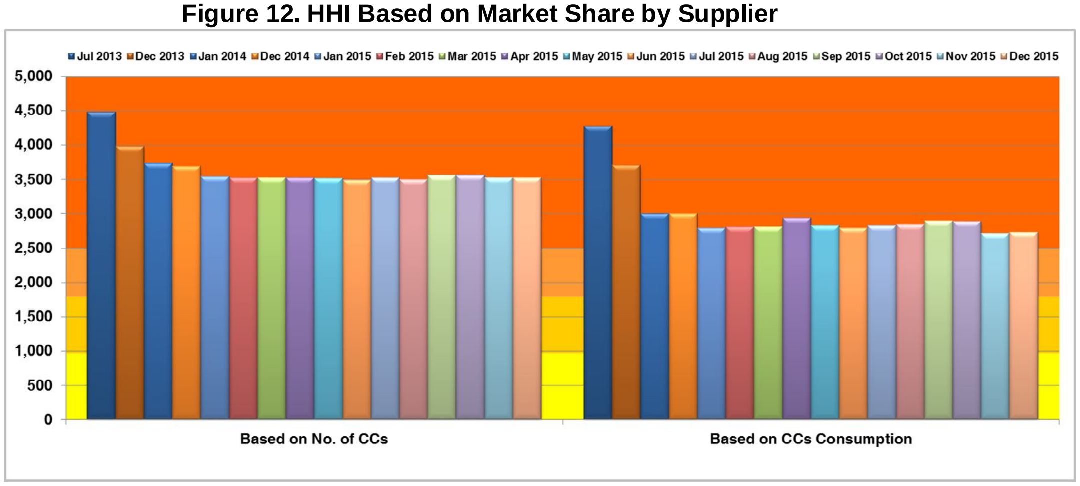


### 3.2.2. Herfindahl–Hirschman Index (HHI)[3]

The monthly Herfindahl-Hirschman Index values depicted in Figure 12 were observed to be on a decreasing trend, as affected both by the increased number of Contestable Customers participating in the retail market market as well as with participation from additional RES.

Nonetheless, it is to be noted that the market remained highly concentrated based on the market share of suppliers as measured both in terms of number and consumption of registered Contestable Customers, with majority of the market share still held by MRLCOLRE.

**Figure 12. HHI Based on Market Share by Supplier**




### 3.2.3. Four-firm Concentration Index (C4)[4]

Figure 13 below shows the monthly four-firm concentration index. Similar to HHI, the monthly C4 values were noted to be decreasing as participation from the Contestable Customers in the retail market increased, although at a very slow rate. When measured in terms of the number of Contestable Customers, the C4 values dropped from an initial value of 97 percent in July 2013 to 87 percent in December 2014. This further dropped to 85 percent by end of December 2015 billing period.

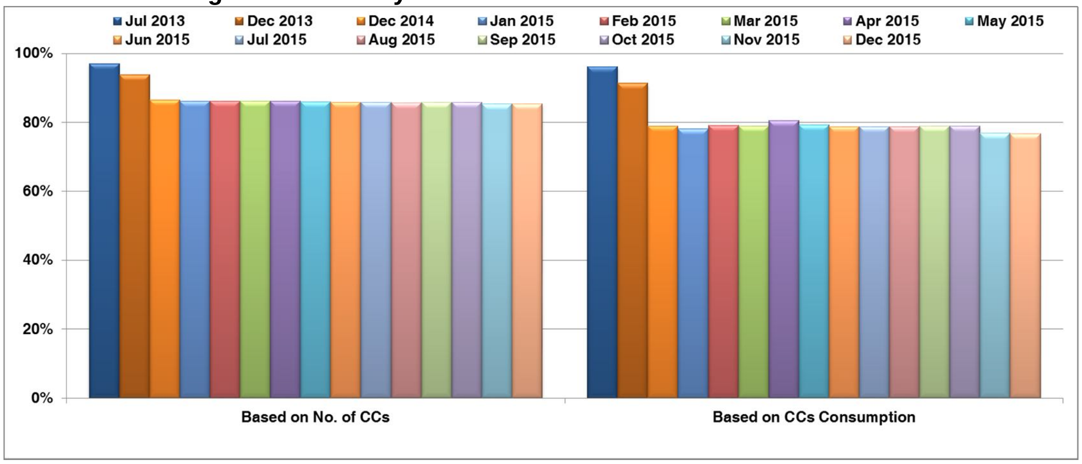
The same pattern in the drop of C4 values was observed when the electricity consumption of Contestable Customers was calculated. The C4 gradually dropped from 96 percent in July 2013 to 79 percent in December 2014, and further to 77 percent by end of the December 2015 billing period.

[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 - concentrated
Greater than 2500 - highly concentrated

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

**Figure 13. Monthly Four-firm Concentration Index**




3.2.4. Supplier Structure

Table 8 shows the degree of integration between the Suppliers and Generation Companies. It was noted that majority of the RES registered in the retail market, about 71 percent, are affiliated with Generation Companies. Moreover, about 33 percent and 17 percent of Local RES and Supplier of Last Resort, respectively, likewise have affiliate generators.

**Table 8. Number of Suppliers with Affiliate Generation Companies**

| Category | No. of Suppliers | No. of Suppliers with Affiliate Generator | % of Suppliers with Affiliate Generators |
|---|---|---|---|
| Retail Electricity Supplier | 17 | 12 | 71% |
| Local Retail Electricity Supplier | 12 | 4 | 33% |
| Supplier of Last Resort | 6 | 1 | 17% |
| **Total** | 35 | 17 | 49% |

## 4. RETAIL ACTIVITY

4.1. Customer Participation Level

The commencement of the retail market operations was initially participated in by 142 industries from the Luzon region. As shown in Table 9, the level of participation progressively increased in the succeeding months and by December 2014, a total of 231 industries registered in the market as Contestable Customers, of which 228 came from Luzon and the other 3 from the Visayas.

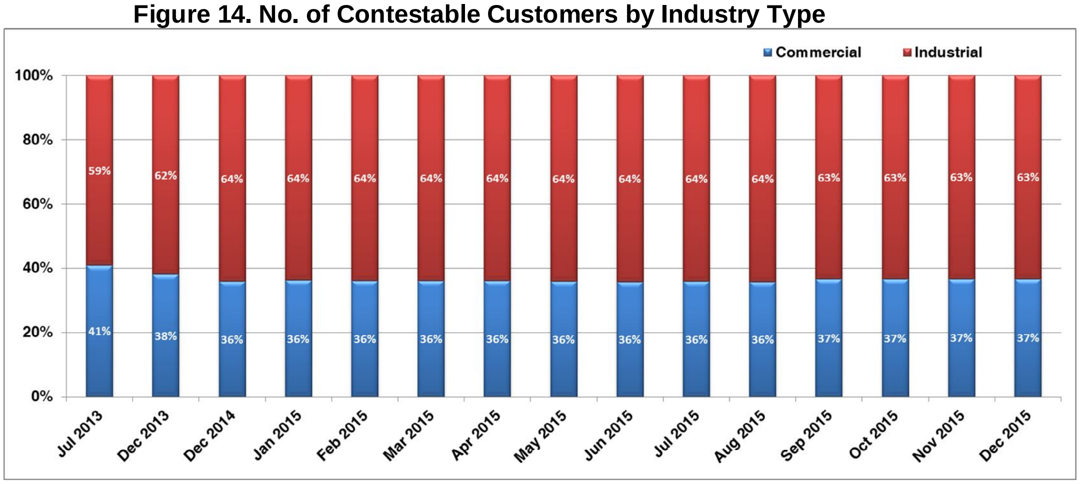
Similarly, the level of Contestable Customer participation from the commercial sector increased from 98 at the start of RCOA operations to 129 in December 2014, all coming from the Luzon region. By the end of the December 2015 billing period, there were 139 commercial Contestable Customers registered in the market, of which only 1 came from the Visayas.

**Table 9. Actual No. of Contestable Customers by Industry Type**

| Region / Membership Type | No. of Contestable Customers (CCs) As of Billing Quarter | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2014 | | | | 2015 | | | |
| | 1st Q | 2nd Q | 3rd Q | 4th Q | 1st Q | 2nd Q | 3rd Q | 4th Q |
| **Luzon** | **316** | **326** | **345** | **357** | **361** | **365** | **374** | **375** |
| *Commercial* | *114* | *117* | *119* | *129* | *131* | *131* | *138* | *138* |
| *Industrial* | *202* | *209* | *226* | *228* | *230* | *234* | *236* | *237* |
| **Visayas** | **1** | **2** | **3** | **3** | **3** | **3** | **3** | **4** |
| *Commercial* | | | | | | | | *1* |
| *Industrial* | *1* | *2* | *3* | *3* | *3* | *3* | *3* | *3* |
| **TOTAL** | **317** | **328** | **348** | **360** | **364** | **368** | **377** | **379** |

Figure 14 below denotes that the Industrial Sector comprised more than half of the Contestable Customer participation in the retail market throughout the period in review.

**Figure 14. No. of Contestable Customers by Industry Type**




## 4.2. Customer Switching Rate

Table 10 shows the rate of Customer switching in each billing month for the relevant billing years.

**Table 10. Rate of Customer Switching**

| Particulars | Contestable Cutomer Switching Rate (For Contestable Cutomers Switching the Following Billing Month) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec 2014 | Jan 2015 | Feb 2015 | Mar 2015 | Apr 2015 | May 2015 | Jun 2015 | Jul 2015 | Aug 2015 | Sep 2015 | Oct 2015 | Nov 2015 | Dec 2015 |
| **Switching Rate (Luzon)** | 1.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.4% | 0.0% | 0.0% | 0.0% | 0.5% | 0.0% |
| *Total No. of CCs* | *357* | *359* | *361* | *361* | *361* | *363* | *365* | *368* | *369* | *374* | *374* | *375* | *375* |
| *Total No. of CCs that Switched* | *5* | - | - | - | - | - | - | *5* | - | - | - | *2* | - |
| **Switching Rate (Visayas)** | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| *Total No. of CCs* | *3* | *3* | *3* | *3* | *3* | *3* | *3* | *3* | *3* | *3* | *3* | *4* | *4* |
| *Total No. of CCs that Switched* | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Switching Rate (Luzon-Visayas)** | 1.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.3% | 0.0% | 0.0% | 0.0% | 0.5% | 0.0% |
| *Total No. of CCs* | *360* | *362* | *364* | *364* | *364* | *366* | *368* | *371* | *372* | *377* | *377* | *379* | *379* |
| *Total No. of CCs that Switched* | *5* | - | - | - | - | - | - | *5* | - | - | - | *2* | - |

Details on Customer Switching is shown in Table 11 below, which provides the list of Contestable Customers switching suppliers during the 2015 billing year with the corresponding effectivity of the switch.

**Table 11. Customer Switching *List***

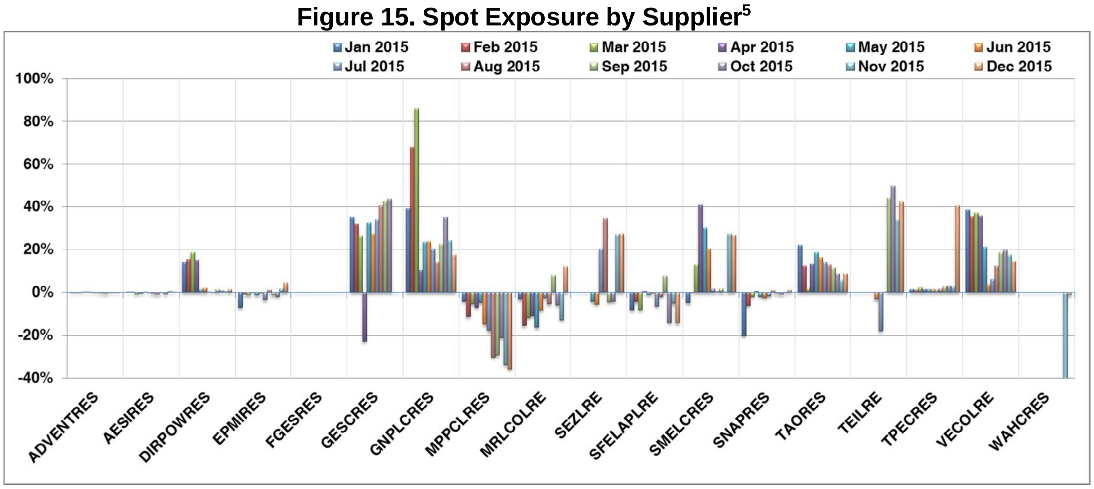
| No. | TP Name | Trading Particopant | Supplier Name | | Effectivity Date |
|---|---|---|---|---|---|
| | | | From | To | |
| 1 | FTCP01R | Fujitsu Ten Corporation of the Philippines | MRLCOLRE | EPMIRES | Jan 2015 |
| 2 | NDPC01R | Nidec Philippines Corporation | | | Jan 2015 |
| 3 | NPC002R | | | | Jan 2015 |
| 4 | TDKP01R | TDK Philippines Corporation | | | Jan 2015 |
| 5 | UCPI01R | Universal Robina | | TAORES | Jan 2015 |
| 6 | MWCI01R | Manila Water Company, Inc. | TPECRES | TAORES | Jul 2015 |
| 7 | MWCI02R | | | | |
| 8 | MWCI03R | | | | |
| 9 | MWCI04R | | | | |
| 10 | MWCI05R | | | | |
| 11 | CPSC01R | Cathay Pacific Steel Corporation | GESCRES | SMELCRES | Nov 2015 |
| 12 | CTPSC1R | | | | |

Throughout the period in review, 12 Contestable Customers were noted to have switched suppliers. In January 2015, the switching of 5 Contestable Customers from MRLCOLRE took effect, 4 of which started to be served by EPMIRES and the other 1 by TAORES. By the third billing quarter, another 5 Contestable Customers switched suppliers, from TPECRES to TAORES, while 2 other switched from GESCRES to SMELCRES in November 2015 billing period.

## 4.3. Spot Exposure

Figure 15 shows the spot exposure of each Supplier throughout the period in review. Spot exposure depicts the level of energy withdrawn, based on Metered Quantity of the Suppliers' Contestable Customers, which are not covered by bilateral contracts.

**Figure 15. Spot Exposure by Supplier[5]**




Among the suppliers, only GNPLCRES, TAORES, TPECRES and VECOLRE consistently incurred positive spot exposures during the period, while MPPCLRES was the only Supplier with negative spot exposure throughout the 2015 billing period.

---

[5] The Spot Exposure from the Supplier's perspective is calculated by dividing the difference between the *Total Energy Withdrawn* (MQ) and *Total Bilateral* Contract (BCQ) over the *Total Energy* Withdrawn for a particular period (t).

For the period in review, GNPLCRES' spot exposures was on a varying level ranging from positive 11 percent to as high as positive 86 percent. Its annual average spot exposure was recorded at 32 percent. GNPLCRES was recorded to have spot transactions beginning only in December 2014, wherein it incurred a 100 percent spot exposure. Same was the case of VECOLRE, wherein its spot exposure per month varied from as low as positive 4 percent to as high as positive 39 percent. Its average annual spot exposure was recorded at positive 22 percent.

It was noted that before the switching of GESCRES' Contestable Customers took effect in November 2015 billing period, its monthly spot exposures were almost consistently on the positive side, ranging from 26 percent to 44 percent, except during the April billing month wherein it incurred a negative 23 percent spot exposure.

On the other hand, MRLCOLRE almost consistently incurred negative spot exposures denoting that majority of the electricity consumption of its Contestable Customers were covered by bilateral contracts. Except for the September and December 2015 billing months, where MRLCOLRE incurred positive spot exposures.

## 5. CONCLUSION

The results of the indices indicate that the objective of RCOA to promote competition and customer choice and empowerment has yet to be fully achieved. It is noteworthy that while the number of Contestable Customers has grown since the retail market started in July 2013, the growth has been slow and the level of participation has been found wanting considering that the 379 Contestable Customers registered in the market only makes up for 36 percent of the expected 1,057 Contestable Customers already issued with a Certificate of Contestability.

Furthermore, majority of the Contestable Customers are within the MERALCO franchise wherein 212 of these are being supplied by MERALCO's local RES. With the MERALCO local RES controlling the majority of the market share, the retail market is best described to be highly concentrated.