



Market Surveillance Committee Quarterly Retail Market Assessment Report

26 September to 25 December 2021

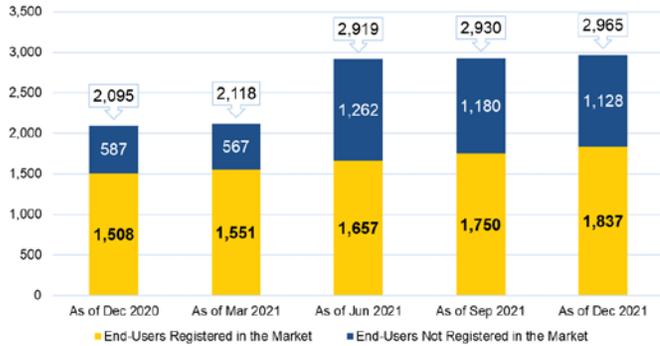
February 2022

This Report is prepared by the
Philippine Electricity Market Corporation –
Market Assessment for the
Market Surveillance Committee

The information contained in this document is based on data that are subject to continuous verification by the Philippine Electricity Market Corporation (PEMC). The same information is subject to change as updated figures come in.

CONTESTABLE CUSTOMER PROFILE

QUARTERLY CUMULATIVE NUMBER



- Additional 87 registered Contestable Customers equivalent to an 5% increase from Q3-2021
- 66% market participation rate from eligible consumers

Note: Increase in unregistered consumers due to new market threshold (500kW-749kW) starting 26 February 2021

THRESHOLDS

500-749kW

| Period | No. of CCs |
|-----------------------|------------|
| As of Mar 2021 | 13 |
| As of Jun 2021 | 91 |
| As of Sep 2021 | 159 |
| As of Dec 2021 | 223 |

Registrants accounted to 12%

750-999kW

| Period | No. of CCs |
|-----------------------|------------|
| As of Dec 2020 | 373 |
| As of Mar 2021 | 388 |
| As of Jun 2021 | 402 |
| As of Sep 2021 | 404 |
| As of Dec 2021 | 410 |

Registrants accounted to 22%

1MW & ABOVE

| Period | No. of CCs |
|-----------------------|--------------|
| As of Dec 2020 | 1,135 |
| As of Mar 2021 | 1,150 |
| As of Jun 2021 | 1,164 |
| As of Sep 2021 | 1,188 |
| As of Dec 2021 | 1,204 |

Registrants accounted to 68%

Steady increase in participation in various thresholds

PER RETAIL ACTIVITY



COMMERCIAL

| Period | No. of CCs |
|-----------------------|------------|
| As of Dec 2020 | 802 |
| As of Mar 2021 | 829 |
| As of Jun 2021 | 883 |
| As of Sep 2021 | 923 |
| As of Dec 2021 | 966 |



INDUSTRIAL

| Period | No. of CCs |
|-----------------------|------------|
| As of Dec 2020 | 706 |
| As of Mar 2021 | 722 |
| As of Jun 2021 | 774 |
| As of Sep 2021 | 828 |
| As of Dec 2021 | 871 |

53% Contestable Customers were engaged in commercial activities, 47% were in industrial activities

PER LOCATION

| LUZON | |
|-----------------------|--------------|
| Period | No. of CCs |
| As of Dec 2020 | 1,349 |
| As of Mar 2021 | 1,385 |
| As of Jun 2021 | 1,476 |
| As of Sep 2021 | 1,559 |
| As of Dec 2021 | 1,614 |

| VISAYAS | |
|-----------------------|------------|
| Period | No. of CCs |
| As of Dec 2020 | 159 |
| As of Mar 2021 | 166 |
| As of Jun 2021 | 181 |
| As of Sep 2021 | 191 |
| As of Dec 2021 | 223 |

88% of Contestable Customers were located in Luzon, while the remaining 12% Visayas-based
Note: RCOA is only implemented in regions with WESM operations

BY AVERAGE CONSUMPTION

| 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 | Sub-Total Per Region |
|---|-----------------|----------------------|-----------------------|------------------------|------------------------|------------------------|----------------------|
| LUZON | 60.32% ▼ | 23.73% ▲ | 2.34% ▼ | 0.54% ▼ | 0.54% ▼ | 0.38% ▲ | 87.86% ▼ |
| VISAYAS | 10.13% ▲ | 1.63% ▼ | 0.22% ▲ | 0.00% | 0.05% ▼ | 0.11% | 12.14% ▲ |
| Sub-Total Per Level of Average Energy Consumption | 70.44% ▼ | 25.37% | 2.56% ▼ | 0.54% ▼ | 0.60% ▼ | 0.49% ▲ | 100.00% |
| Percent Change from the previous quarter | 0.55% ▼ | 0.87% ▲ | 0.24% ▼ | 0.09% ▼ | 0.09% ▼ | 0.09% ▲ | - |

- These figures in various brackets of average consumption generally remained unchanged compared to the previous quarter
- So far, there has not been a recorded average consumption above 50MWh

SUPPLIER PROFILE

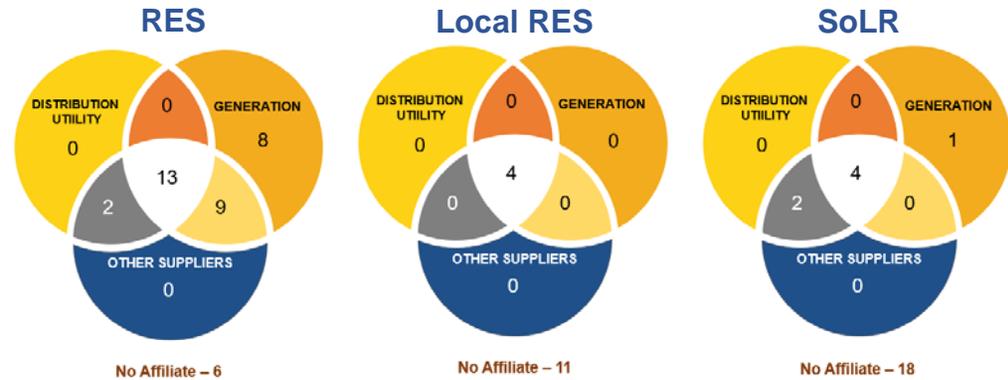
QUARTERLY CUMULATIVE NUMBER

There is a new Local Retail Electricity Supplier that participated in the RCOA market, which is the Nueva Ecija I Electric Cooperative, Inc. (30 September 2021).

| | Licensed/Authorized | Registered | With Active Contract |
|-------------|---------------------|------------|----------------------|
| RES | 44 | 38 | 31 |
| LRES | 28 | 15 | 3 |
| SoLR | 47 | 25 | 0 |

List of registered Suppliers are provided as Annex A

SUPPLIER AFFILIATION



- Majority of the Suppliers are affiliated with generator market participants
- Suppliers were likewise affiliated with DUs and other Suppliers, or a combination thereof in the market

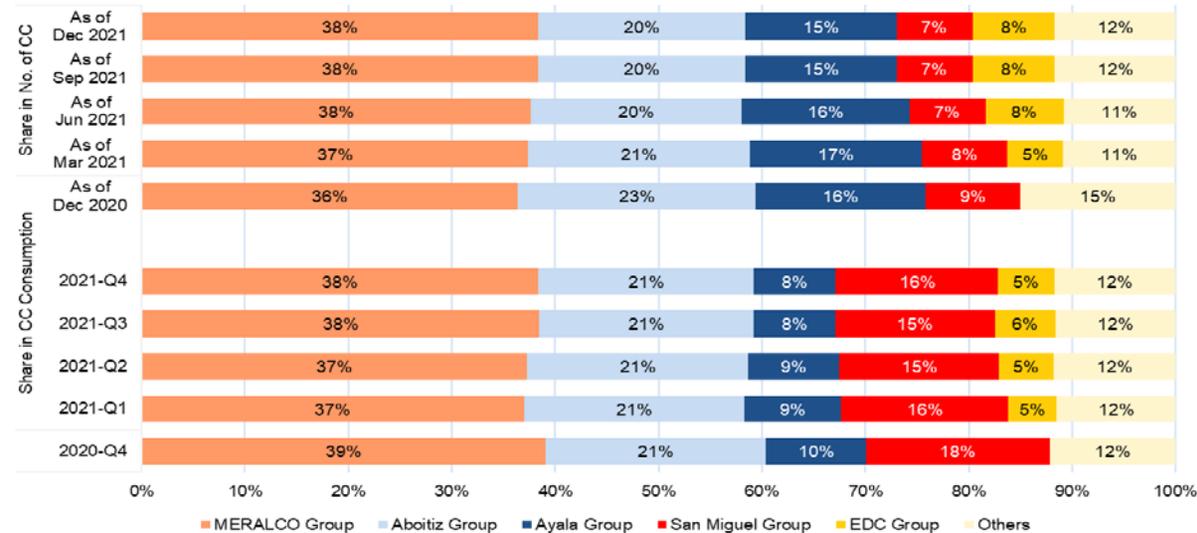
Note: Affiliations based on available information from the ERC as of December 2021 and the RCOA Registered Suppliers

SHARE IN CONTESTABLE CUSTOMER (BY NUMBER AND CONSUMPTION)

MERALCO Group remained the top entity on both measures (number of engaged CCs and total consumption) at 38%, which is attributable to increasing participation in the new threshold level and with the lesser restriction in the government's implementation of protocols thereby allowing more economic activities in the load center, respectively. Being the largest service provider for the end-users and having direct and first access to most eligible consumers may have played a role in the preference of consumers towards contracting with MERALCO RES services.

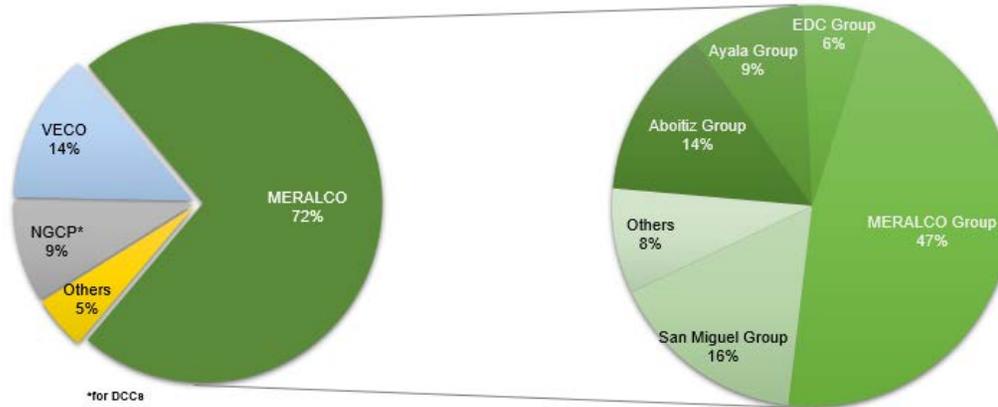
Other groups experienced minimal changes in shares, both in Contestable Customers engaged and total consumption

It is also worthy to note that the Ayala group outnumbered the San Miguel group in terms of engaged CC. Despite this, the San Miguel group still ended up with a higher share of CC consumption indicating its clienteles' relatively larger scales business over Ayala group.



MARKET STRUCTURE FRANCHISE AREA

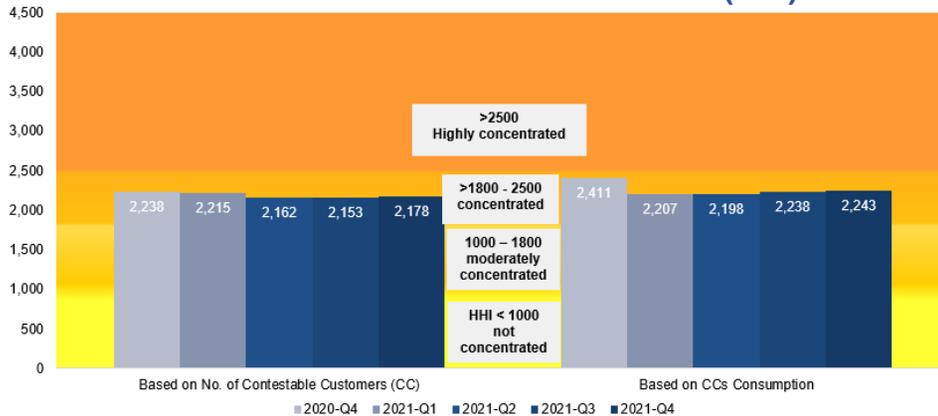
- With the more lenient protocols implemented in the NCR, **MERALCO Franchise Area** recorded **72%** of the total consumption of CCs for Q4-2021.
- About **14%** of the total consumption was in the Visayas region under **VECO Franchise Area** and **9%** of total consumption came from **Directly-Connected Customers** to the grid while the remaining **5%** were scattered among other franchise areas.



*for DCCs
List of registered DUs and ECs are provided as Annex B

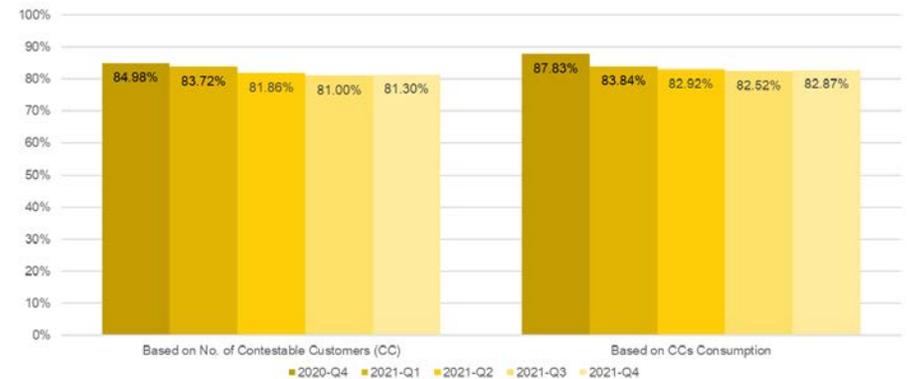
Inside MERALCO franchise area, **47%** were served by the **MRLCOLRE** and its affiliates, while other Suppliers experienced **minimal changes** in shares

HERFINDAHL-HIRSCHMAN INDEX (HHI)



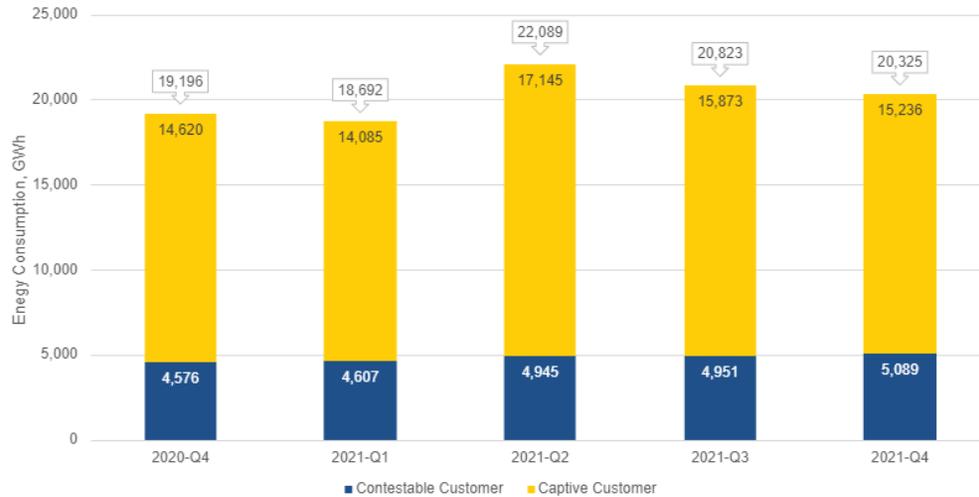
- 2021-Q4 remained a Concentrated Market both in terms of share in number of Contestable Customers and energy consumption.
- The **increase** in 2021-Q4 market concentration for the **no. of CCs** is contributed by the **Aboitiz Group**.
- The **San Miguel Group**, in the other hand contributed the **increase** in market concentration **based on CCs consumption**.

FOUR-FIRM INDEX (C4)



C4 values remained high at **above 80%** both in terms of share in number of Contestable Customers and energy consumption for the covered period, and in the same manner with HHI, had a **decreasing trend** which also indicates improvement in market competition. The result of the four-firm index likewise clarifies that the slight uptick in the concentration based on consumption using the HHI did not come from the top 4 participants with the greatest share in terms of consumption.

MARKET PERFORMANCE TOTAL ENERGY CONSUMPTION – SYSTEM



| Change in Consumption | | |
|-----------------------|-----------------|-----------------------|
| | Year-on-Year, % | Quarter-on-Quarter, % |
| System | 5.88% | (2.39%) |
| Captive Consumer | 4.21% | (4.01%) |
| Contestable Consumers | 11.22% | 2.80% |

During the period in review, the market generally saw a **slight decrease in consumption** compared to the previous quarter but a rather **significant increase** compared to the previous year. The decrease in the consumption in the fourth quarter is mainly because of the typhoon Odette which devastated the Visayas grid on the month December, causing the dip in consumption for the captive customers.

On the other hand, Contestable Customers demonstrated a steady rise in demand in the middle of a festive quarter under both comparison periods.

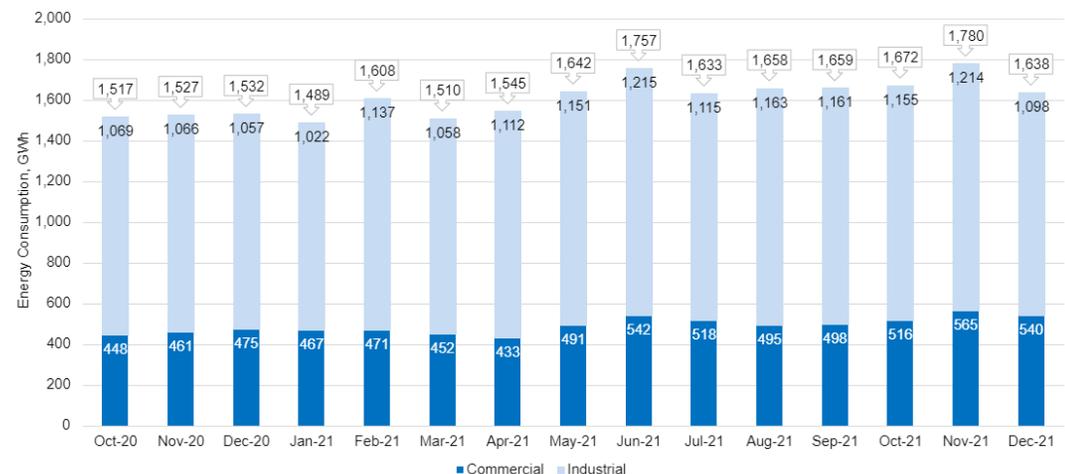
TOTAL ENERGY CONSUMPTION – INDUSTRY TYPE

Industrial Contestable Customers

- **Higher level of consumption** was observed for the entire 2021-Q4 as compared to 2020-Q4 data and even amidst the continuous implementation of alert level protocols.
- Among the contributory factors were the **entry of participants in the new market thresholds** and continuous or expanded operations of essential businesses in the fight with the pandemic

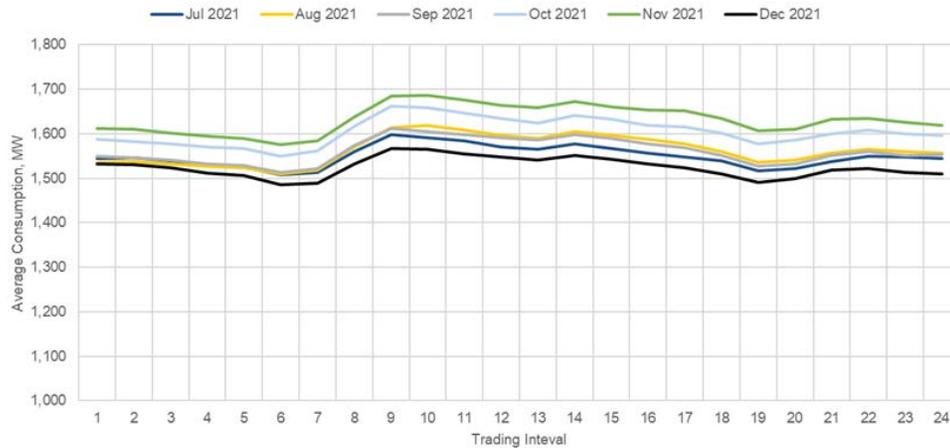
Commercial Contestable Customers

- **Increase in consumption** was likewise recorded for commercial CCs due to similar reasons above.



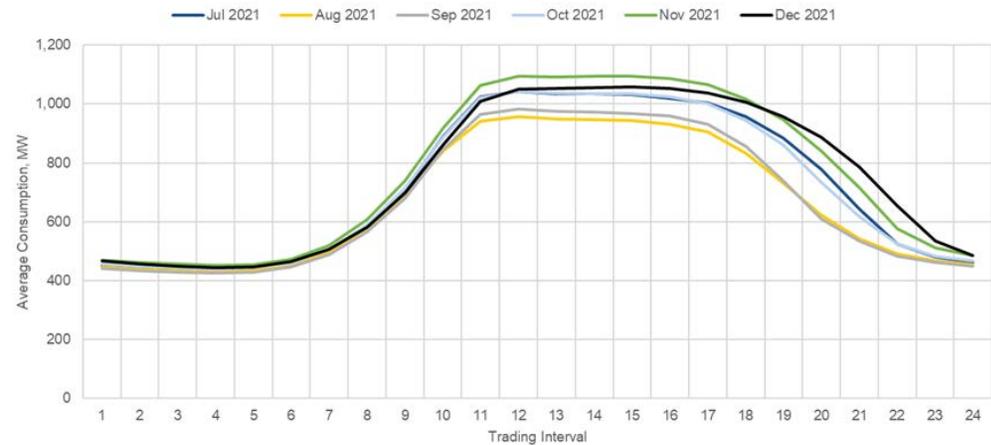
MARKET PERFORMANCE

LOAD PROFILE - INDUSTRIAL



- **3 consistent dips** were observed for the months in comparison which signifying observance of CCs to **three (3) breaks** or exchange of shifts among employees (0600H, 1300H, and 1900H)

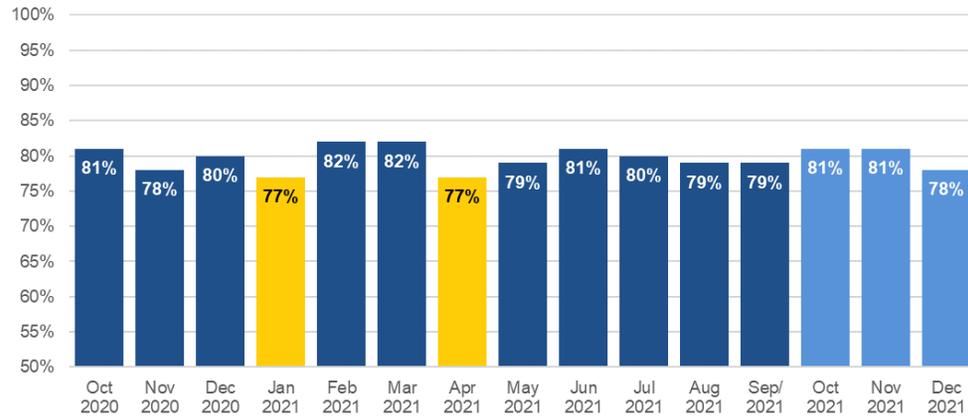
LOAD PROFILE -



- The stark contrast between daytime and nighttime consumption levels of commercial CCs still is pronounced in their load profile of the commercial CCs tends to provide **glaring variations** considering that these participants normally operate **during the daytime** or even at **peak hours**
- The **shift in the peak demand** was still observed for the months in comparison – from the normal peak of 1000H – 2100H to **1100H – 1700H**
- The relaxation of the alert level classification in November 2021 may have significantly contributed to the apparent inflation of the month's load profile

MARKET PERFORMANCE

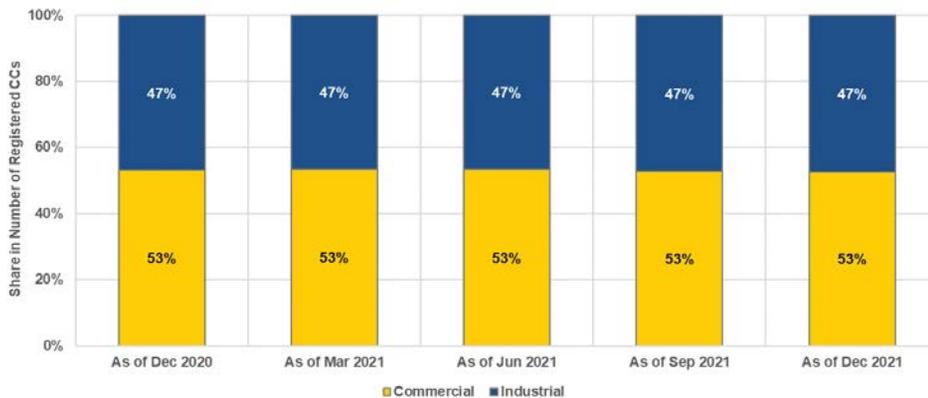
LOAD FACTOR



- The load factor for the fourth quarter of 2021 resulted to the usual values when compared to previous months as presented in the illustration.
- **January and April 2021** were the months which had the **lowest load factors** that were affected by the **sudden change in consumption** behavior of the Contestable Customers in compliance with the stricter community quarantine imposed by the government and the expected sudden lowered demand during the long holidays
 - Load factors are calculated using the maximum consumption as compared with the total consumption for a specified time – this relationship highly affects the resulting values of load factors

RETAIL ACTIVITY

CUSTOMER PARTICIPATION



The **commercial sector** comprises more than half of the Contestable Customers' participation in the retail market, outnumbering the registered industrial Contestable Customers by a few percent.

- Constant percent share all throughout the year for commercial and industrial sector.

RETAIL ACTIVITY

SWITCHING RATE

| Particulars | Oct-20 | Nov-20 | Dec-20 | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May 2021 | Jun 2021 | Jul 2021 | Aug 2021 | Sep 2021 | Oct 2021 | Nov 2021 | Dec 2021 |
|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Switching Rate (Luzon) | 1.13% | 1.19% | 0.37% | 0.74% | 1.03% | 2.09% | 1.41% | 0.62% | 0.88% | 2.98% | 0.45% | 0.51% | 0.38% | 0.13% | 0.06% |
| Total No. of CCs | 1,332 | 1,341 | 1,349 | 1,356 | 1,362 | 1,385 | 1,416 | 1,442 | 1,476 | 1,508 | 1,540 | 1,559 | 1,570 | 1,590 | 1,614 |
| Total No. of CCs that Switched | 15 | 16 | 5 | 10 | 14 | 29 | 20 | 9 | 13 | 45 | 7 | 8 | 6 | 2 | 1 |
| LRES to RES | 1 | | 1 | 2 | | 1 | | 1 | | | 3 | | | | |
| RES to LRES | 4 | 1 | 2 | 1 | 10 | 14 | 3 | | | | 1 | | 3 | | |
| RES to RES | 10 | 15 | 2 | 7 | 4 | 14 | 17 | 8 | 13 | 45 | 3 | 8 | 3 | 2 | 1 |
| SOLR to RES | | | | | | | | | | | | | | | |
| Switching Rate (Visayas) | 0.65% | 0.00% | 1.26% | 1.85% | 0.61% | 4.82% | 2.96% | 1.12% | 0.55% | 2.20% | 0.00% | 0.00% | 0.47% | 0.00% | 0.00% |
| Total No. of CCs | 153 | 155 | 159 | 162 | 165 | 166 | 169 | 179 | 181 | 182 | 188 | 191 | 212 | 217 | 223 |
| Total No. of CCs that Switched | 1 | | 2 | 3 | 1 | 8 | 5 | 2 | 1 | 4 | | | 1 | | |
| LRES to RES | | | | | | | | | | | | | | | |
| RES to RES | 1 | | 2 | 3 | 1 | 8 | 5 | 2 | 1 | 4 | | | 1 | | |
| Switching Rate (Luzon-Visayas) | 1.08% | 1.07% | 0.46% | 0.86% | 0.98% | 2.39% | 1.58% | 0.68% | 0.84% | 2.90% | 0.41% | 0.46% | 0.39% | 0.11% | 0.05% |
| Total No. of CCs | 1,485 | 1,496 | 1,508 | 1,518 | 1,527 | 1,551 | 1,585 | 1,621 | 1,657 | 1,690 | 1,728 | 1,750 | 1,782 | 1,807 | 1,837 |
| Total No. of CCs that Switched | 16 | 16 | 7 | 13 | 15 | 37 | 25 | 11 | 14 | 49 | 7 | 8 | 7 | 2 | 1 |

- Ten (10) switches were recorded during the fourth quarter of 2021
- About 50% of the switches for Q4 of 2021 were between Supplier affiliates

ANNEX A – LIST OF SUPPLIERS

| Category | No. | Market Participant Name | Short Name |
|-----------------------------|-----|---|------------|
| Retail Electricity Supplier | 37 | Aboitiz Energy Solutions, Inc. | AESIRES |
| | | AC Energy Philippines, Inc. | ACEPHRES |
| | | AC Energy, Inc. (formerly AC Energy Holdings, Inc.) | ACERES |
| | | AdventEnergy, Inc. | ADVENTRES |
| | | Anda Power Corporation RES | ANDARES |
| | | AP Renewables Inc. | APRIRES |
| | | Bac-Man Geothermal, Inc. | BGIRES |
| | | Citicore Energy Solutions, Inc. | CESIRES |
| | | Corenergy, Inc. | CORERES |
| | | DirectPower Services, Inc. | DIRPOWRES |
| | | Ecozone Power Management, Inc. | EPMIRES |
| | | EEl Energy Solutions Corporation | EEIRES |
| | | FDC Retail Electricity Sales Corporation | FDCRESC |
| | | First Gen Energy Solutions, Inc. | FGESRES |
| | | Global Energy Supply Corporation | GESCRES |
| | | GNPower Ltd. Co. | GNPLCRES |
| | | Green Core Geothermal, Inc. | GCGIRES |
| | | KEPCO SPC Power Corporation | KSPCRES |
| | | Kratos RES, Inc. | KRATOSRES |
| | | Mabuhay Energy Corporation | MECORES |
| | | Manta Energy, Inc. | MANTARES |
| | | Masinloc Power Partners Company Limited | MPPCLRES |
| | | Mazzaraty Energy Corporation | MACRES |
| | | MeridianX Inc. | MERXRES |
| | | Millennium Power RES, Inc. | MPRIRES |
| | | PetroGreen Energy Corporation | PGECRES |
| | | Premier Energy Resources Corporation | PERCRES |
| | | Prism Energy, Inc. | PRISMRES |
| | | SEM-CALACA RES CORPORATION | SCRCRES |
| | | SMC Consolidated Power Corporation | SMCCPCRES |
| | | SN Aboitiz Power- Magat, Inc. | SNAPMIRES |
| | | SN Aboitiz Power- RES, Inc. | SNAPRES |
| | | Solar Philippines Retail Electricity, Inc. | SPREIRES |
| | | Solvre, Inc. | SOLVRERES |
| | | TeaM (Philippines) Energy Corporation | TPECRES |
| | | Therma Luzon, Inc. | TLIRES |
| | | Vantage Energy Solutions and Management, Inc. | VESMIREs |

| Category | No. | Market Participant Name | Short Name |
|-----------------------------------|-----|---|------------|
| Local Retail Electricity Supplier | 15 | 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 |
| | | Nueva Ecija I Electric Cooperative, Inc. | NEECO1LRE |
| | | 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. | BHCO1SLR |
| | | 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 Electric, Inc. | TEISLR |
| | | Tarlac I Electric Cooperative, Inc. | TRLCO1SLR |
| | | Tarlac II Electric Cooperative, Inc. | TRLCO2SLR |
| | | Visayan Electric Company, Inc. | VECOSLR |

ANNEX B – LIST OF DISTRIBUTION UTILITIES AND ELECTRIC COOPERATIVES

| No. | Short Name | Distribution Utility/ Economic Zone | No. | Short Name | Distribution Utility/ Economic Zone |
|-----|-------------|---|-----|-------------------|---|
| 1 | AEC | Angeles Electric Corporation | 30 | LEYECO V | Leyte V Electric Cooperative, Inc. |
| 2 | AFAB | Authority of the Freeport Area of Bataan | 31 | LEZ | LIMA Enerzone Corporation |
| 3 | AKELCO | Aklan Electric Cooperative, Inc. | 32 | LUELCO | La Union Electric Cooperative, Inc. |
| 4 | ALECO | Albay Electric Cooperative, Inc. | 33 | MECO | Mactan Electric Company |
| 5 | ANTECO | Antique Electric Cooperative, Inc. | 34 | MERALCO | Manila Electric Company |
| 6 | BATELEC I | Batangas I Electric Cooperative, Inc. | 35 | MEZ | Mactan Economic Zone |
| 7 | BATELEC II | Batangas II Electric Cooperative | 36 | MORECO | MORE Electric and Power Corporation |
| 8 | BENECO | Benguet Electric Cooperative | 37 | NEECO I | Nueva Ecija I Electric Cooperative, Inc. |
| 9 | BEZ | Balamban Enerzone Corporation | 38 | NOCECO | Negros Occidental Electric Cooperative, Inc. |
| 10 | BLCI | Bohol Light Company, Inc. | 39 | NONECO | Northern Negros Electric Cooperative, Inc. |
| 11 | BOHECO I | Bohol I Electric Cooperative, Inc. | 40 | NORECO II | Negros Oriental II Electric Cooperative, Inc. |
| 12 | CAGELCO I | Cagayan1 Electric Cooperative, Inc. | 41 | OEDC | Olongapo Electricity Distribution Company |
| 13 | CAGELCO II | Cagayan II Electric Cooperative, Inc. | 42 | PANELCO III | Pangasinan III Electric Cooperative, Inc. |
| 14 | CAPELCO | Capiz Electric Cooperative | 43 | PECO | Panay Electric Co., Inc. |
| 15 | CASURECO II | Camarines Sur II Electric Cooperative, Inc. | 44 | PELCO I | Pampanga I Electric Cooperative, Inc. |
| 16 | CEBECO I | Cebu I Electric Cooperative, Inc. | 45 | PELCO II | Pampanga II Electric Cooperative, Inc. |
| 17 | CEBECO II | Cebu II Electric Cooperative, Inc. | 46 | PELCO III | Pampanga III Electric Cooperative, Inc. |
| 18 | CEDC | Clark Electric Distribution Corporation | 47 | PENELCO | Peninsula Electric Cooperative, Inc. |
| 19 | CELCOR | Cabanatuan Electric Corporation | 48 | PEZA | Philippine Economic Zone Authority |
| 20 | CENECO | Central Negros Electric Cooperative, Inc. | 49 | QUEZELCO I | Quezon I Electric Cooperative, Inc. |
| 21 | CENPELCO | Central Pangasinan Electric Cooperative, Inc. | 50 | SAMELCO I | Samar I Electric Cooperative, Inc. |
| 22 | DECORP | Dagupan Electric Corporation | 51 | SEZ | Subic EnerZone Corporation |
| 23 | DORELCO | Don Orestes Electric Cooperative, Inc. | 52 | SFELAPCO | San Fernando Electric Light and Power Company, Inc. |
| 24 | FIT | First Industrial Township Utilities, Inc. | 53 | SORECO II | Sorsogon II Electric Cooperative, Inc. |
| 25 | ILECO I | Iloilo I Electric Cooperative, Inc. | 54 | TARELCO I | Tarlac I Electric Cooperative, Inc. |
| 26 | INEC | Ilocos Norte Electric Cooperative, Inc. | 55 | TARELCO II | Tarlac II Electric Cooperative, Inc. |
| 27 | ISECO | Ilocos Sur Electric Cooperative, Inc. | 56 | TEI | Tarlac Electric, Inc. |
| 28 | ISELCO I | Isabela I Electric Cooperative, Inc. | 57 | VECO | Visayan Electric Company, Inc. |
| 29 | LEYECO II | Leyte II Electric Cooperative, Inc. | 58 | NGCP ¹ | National Grid Corporation of the Philippines |

¹ For Directly Connected Contestable Customers