# Power Supply Procurement Plan 2024

**GRID**
(MAINLAND)

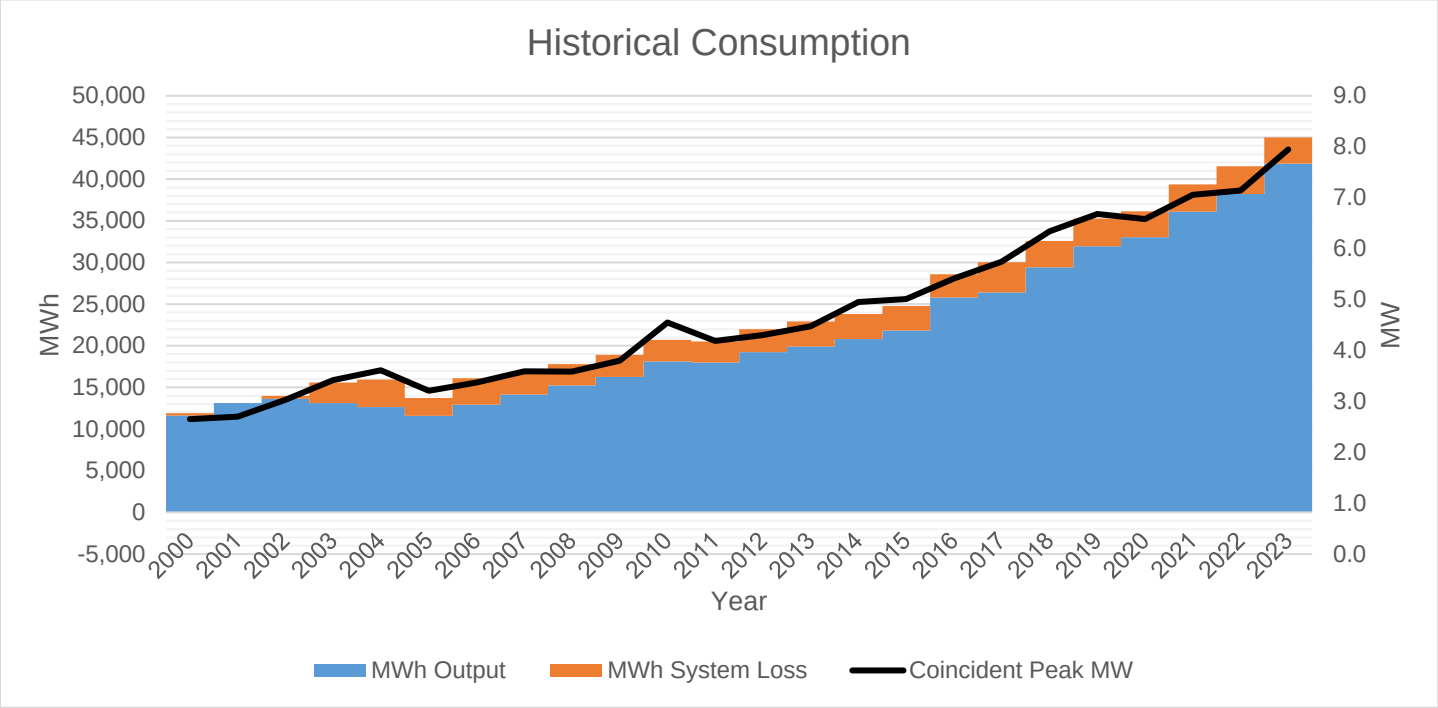
# Historical Consumption Data

| | Coincident Peak MW | MWh Offtake | WESM | MWh Input | MWh Output | MWh System Loss | Load Factor | Discrepancy | Transm'n Loss | System Loss |
|---|---|---|---|---|---|---|---|---|---|---|
| 2000 | 2.65 | 11,907 | 0 | 11,907 | 11,620 | 287 | 51% | 0.00% | 0.00% | 2.41% |
| 2001 | 2.70 | 13,093 | 0 | 13,093 | 13,122 | -29 | 55% | 0.00% | 0.00% | -0.22% |
| 2002 | 3.03 | 13,991 | 0 | 13,991 | 13,653 | 338 | 53% | 0.00% | 0.00% | 2.41% |
| 2003 | 3.42 | 15,677 | 0 | 15,577 | 13,112 | 2,465 | 52% | 0.00% | 0.64% | 15.82% |
| 2004 | 3.61 | 15,549 | 0 | 15,958 | 12,634 | 3,324 | 50% | 0.00% | -2.63% | 20.83% |
| 2005 | 3.21 | 13,738 | 0 | 13,738 | 11,584 | 2,154 | 49% | 0.00% | 0.00% | 15.68% |
| 2006 | 3.37 | 15,800 | 0 | 16,113 | 12,946 | 3,167 | 55% | 0.00% | -1.98% | 19.66% |
| 2007 | 3.59 | 16,656 | 0 | 16,656 | 14,142 | 2,514 | 53% | 0.00% | 0.00% | 15.09% |
| 2008 | 3.58 | 17,813 | 0 | 17,813 | 15,228 | 2,585 | 57% | 0.00% | 0.00% | 14.51% |
| 2009 | 3.80 | 18,918 | 0 | 18,918 | 16,277 | 2,641 | 57% | 0.00% | 0.00% | 13.96% |
| 2010 | 4.55 | 20,711 | 0 | 20,711 | 18,131 | 2,579 | 52% | 0.00% | 0.00% | 12.45% |
| 2011 | 4.19 | 20,374 | 245 | 20,523 | 17,993 | 2,530 | 56% | 0.00% | -0.73% | 12.33% |
| 2012 | 4.30 | 22,164 | 1,434 | 21,976 | 19,227 | 2,749 | 58% | 0.00% | 0.85% | 12.51% |
| 2013 | 4.47 | 23,228 | 1,732 | 22,920 | 19,911 | 3,009 | 58% | 0.00% | 1.33% | 13.13% |
| 2014 | 4.95 | 22,414 | 1,883 | 23,801 | 20,797 | 3,004 | 55% | 0.00% | -6.19% | 12.62% |
| 2015 | 5.01 | 23,605 | 1,771 | 24,791 | 21,816 | 2,975 | 57% | 0.00% | -5.03% | 12.00% |
| 2016 | 5.41 | 29,214 | 3,607 | 28,583 | 25,788 | 2,794 | 60% | 0.00% | 2.16% | 9.78% |
| 2017 | 5.74 | 30,402 | 6,637 | 30,038 | 26,422 | 3,616 | 60% | 0.00% | 1.20% | 12.04% |
| 2018 | 6.34 | 33,030 | 10,349 | 32,592 | 29,411 | 3,182 | 59% | 0.00% | 1.33% | 9.76% |
| 2019 | 6.68 | 35,633 | 12,426 | 35,282 | 31,959 | 3,324 | 60% | 0.00% | 0.99% | 9.42% |
| 2020 | 6.58 | 36,649 | 9,722 | 36,148 | 33,039 | 3,109 | 63% | 0.00% | 1.37% | 8.60% |
| 2021 | 7.06 | 39,985 | 9,178 | 39,371 | 36,093 | 3,278 | 64% | 0.00% | 1.54% | 8.33% |
| 2022 | 7.14 | 42,337 | 6,759 | 41,558 | 38,231 | 3,332 | 66% | 0.01% | 1.84% | 8.02% |
| 2023 | 7.95 | 45,808 | 12,098 | 44,982 | 41,880 | 3,112 | 65% | 0.02% | 1.80% | 6.92% |

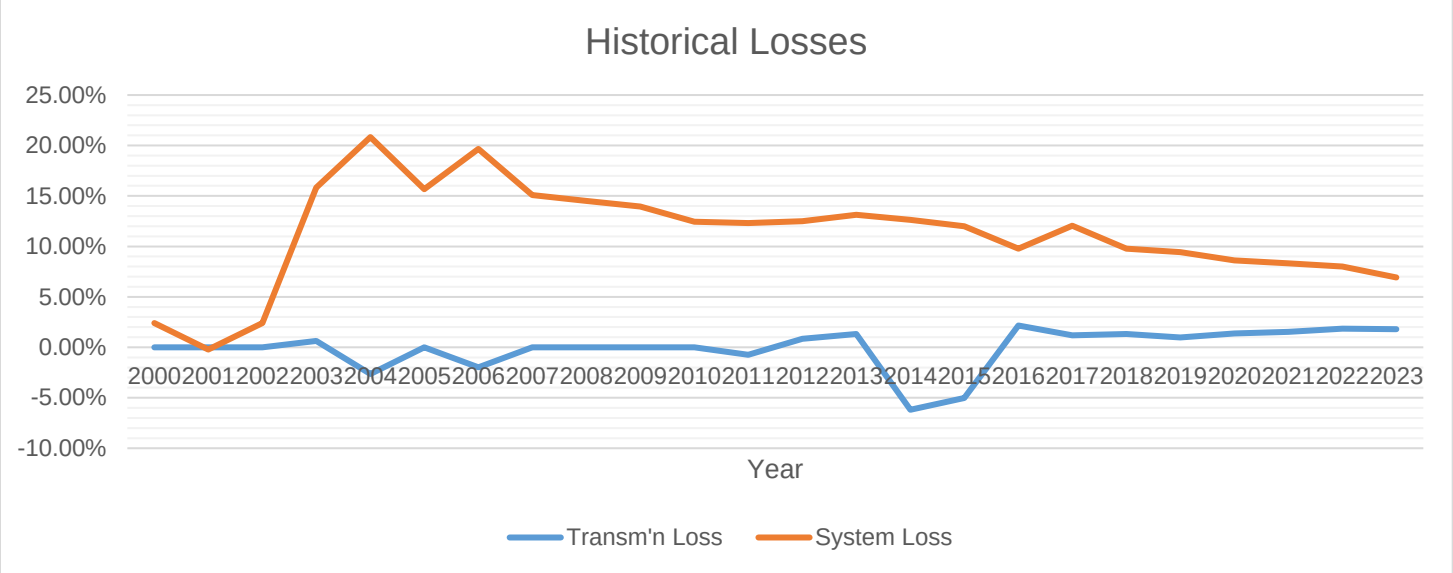
Peak Demand increased from 5.74 MW in 2017 to 6.34 MW in 2018 at a rate of 10% due to big loads such as Jollibee and Mang Inasal. Within the same period, MWH Offtake also increased at a rate of 8.64%. Peak Demand decreased from 6.68 MW in 2019 to 6.58 MW in 2020 due to the effect of COVID-19 pandemic.

MW Demand and MWh Offtake increased from the year 2022 to 2023. Commercial establishments are being allowed by the Local Government to operate after the COVID-19 pandemic. Also, the number of beach resorts started to increase and operate during this year 2023.

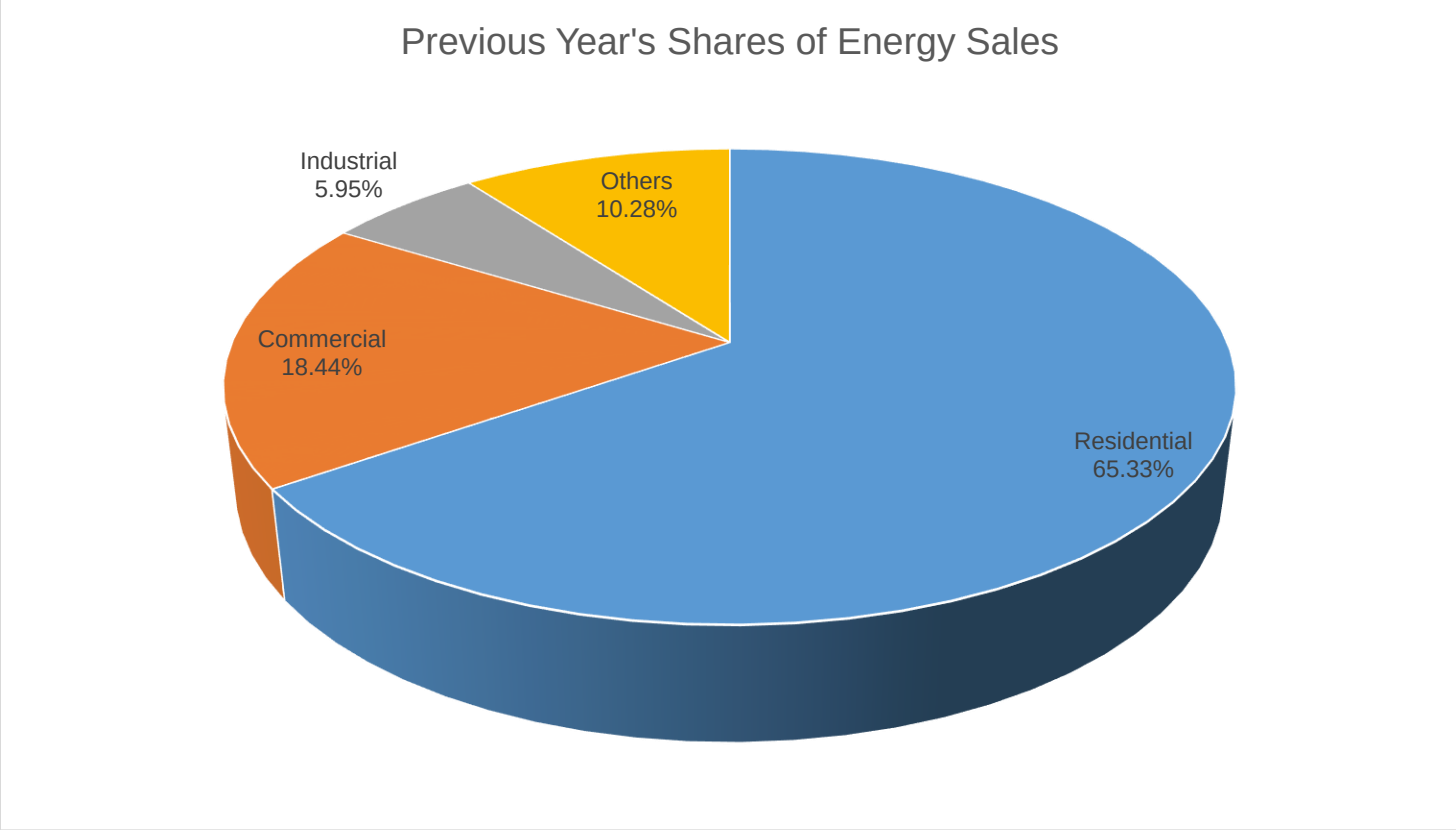
QUEZELCO II has Sale for Resale as Buyer started on August 2021. We are purchasing energy from FLECO for our consumers in Sitio Camagong, Brgy. Bagong Silang, Real, Quezon and Sitio Little Baguio, Brgy. Magsaysay, Infanta, Quezon. These sitios are in the boundary of Quezon and Laguna and is almost 20 kilometers from the dead-end of our distribution line.



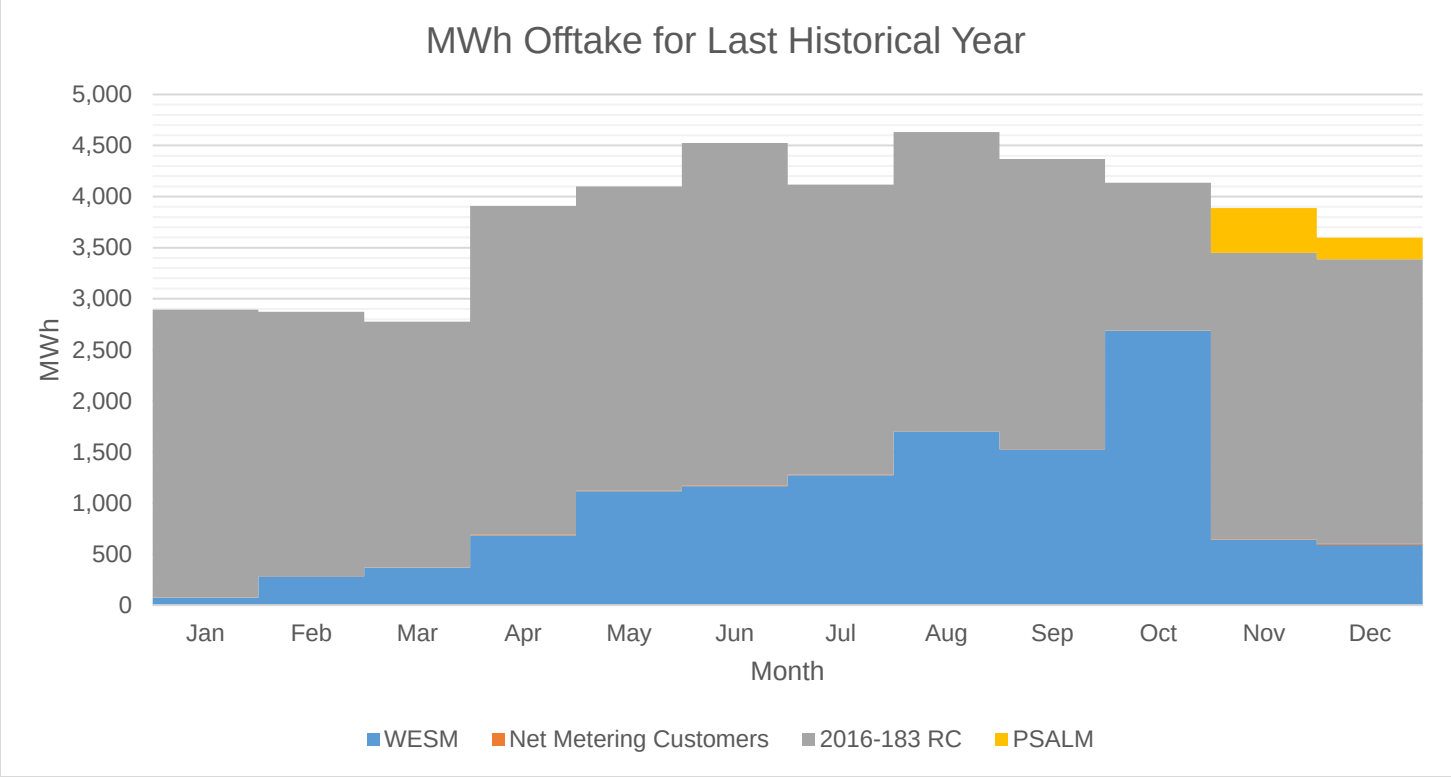

MWh Output increased from year 2022 to year 2023 at a rate of 9.57%, while MWh System Loss decreased at a rate of 6.62% within the same period.



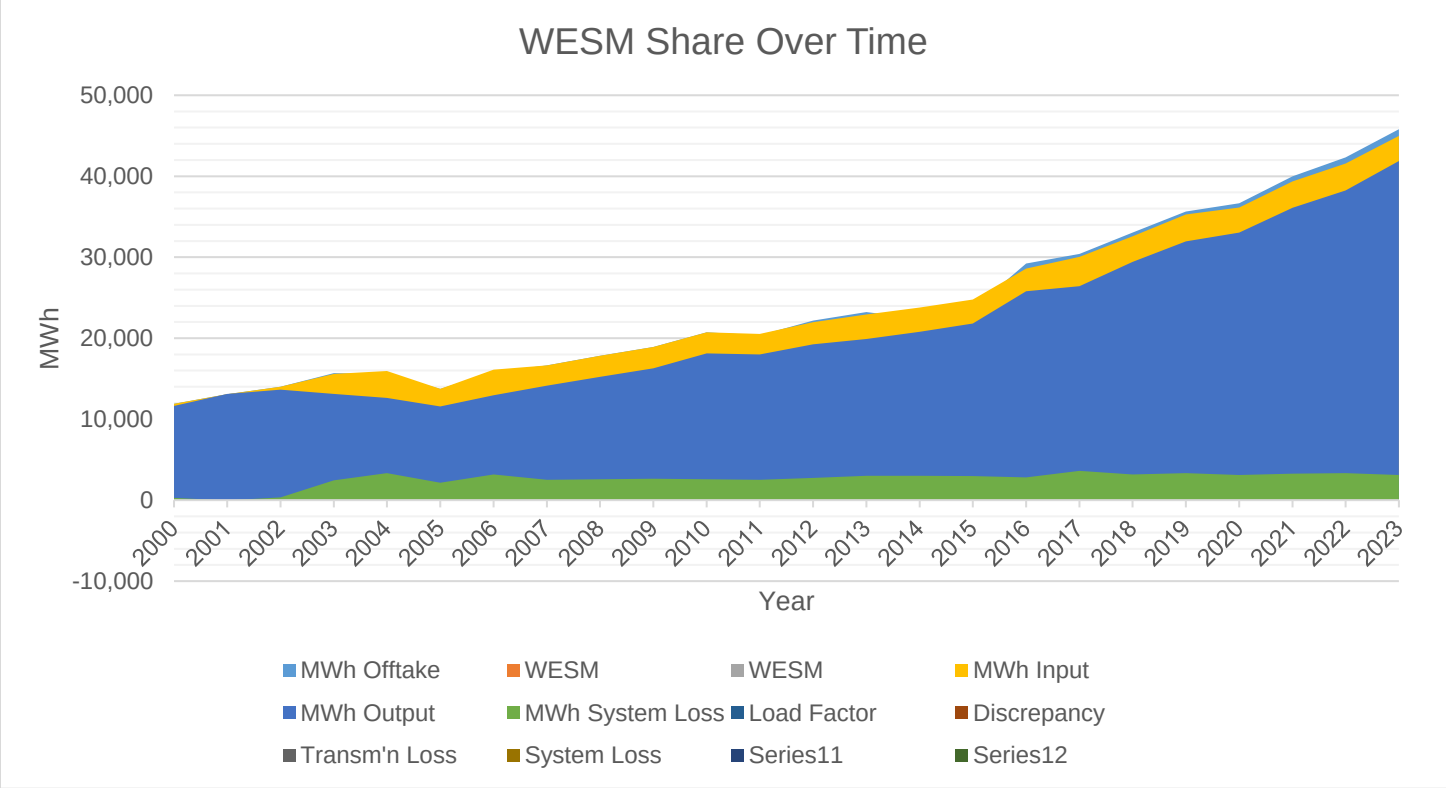

Historically, Transmission Loss has an average of 1.30% while System Loss ranged from 6.89% to 20.83%. System Loss peaked at 20.83% on year 2004 because of typhoon Winnie that destroyed electric distribution lines which resulted to loss of power for almost two (2) months.




Residential customers account for the bulk of energy sales at 65.33% due to the high number of connections. In contrast, Industrial customers accounted for only 5.95% of energy sales due to the low number of connections.

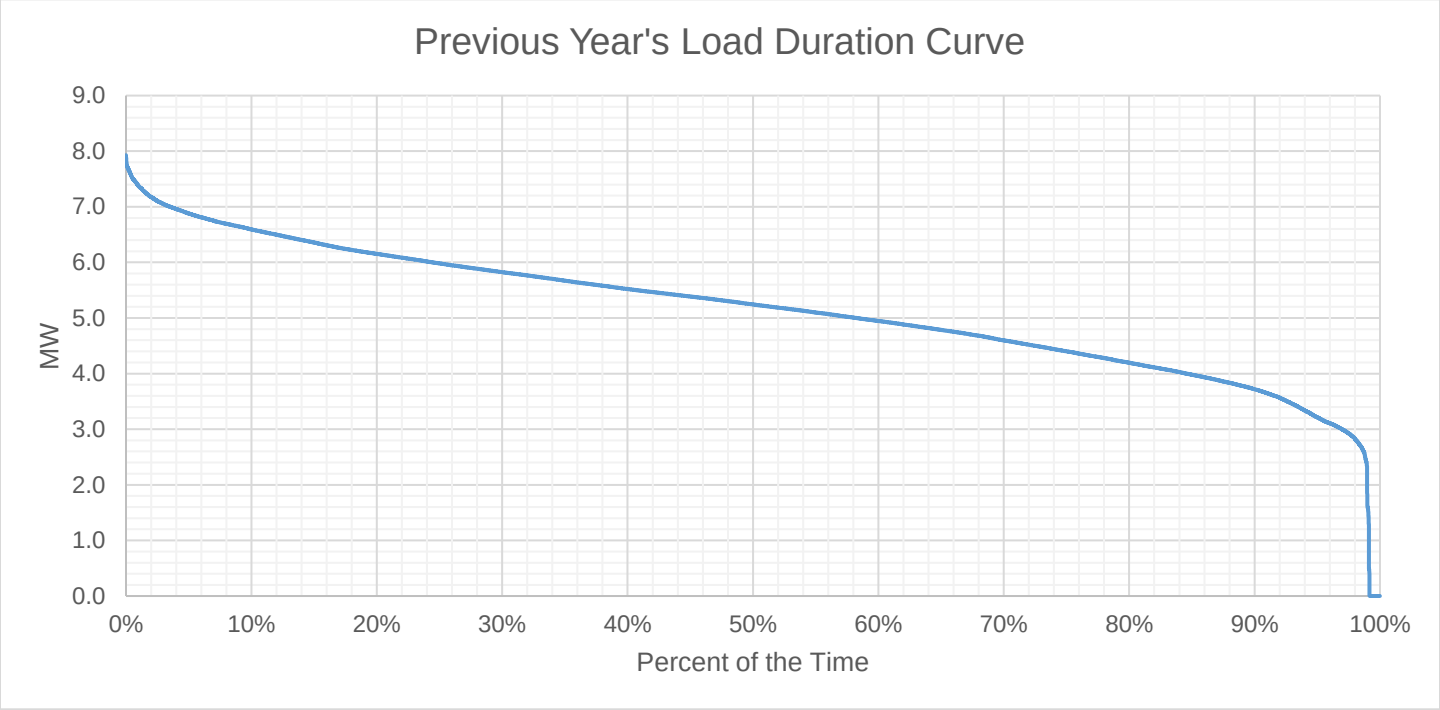



The total Offtake for the last historical year is higher than the quantity stipulated in the PSA.

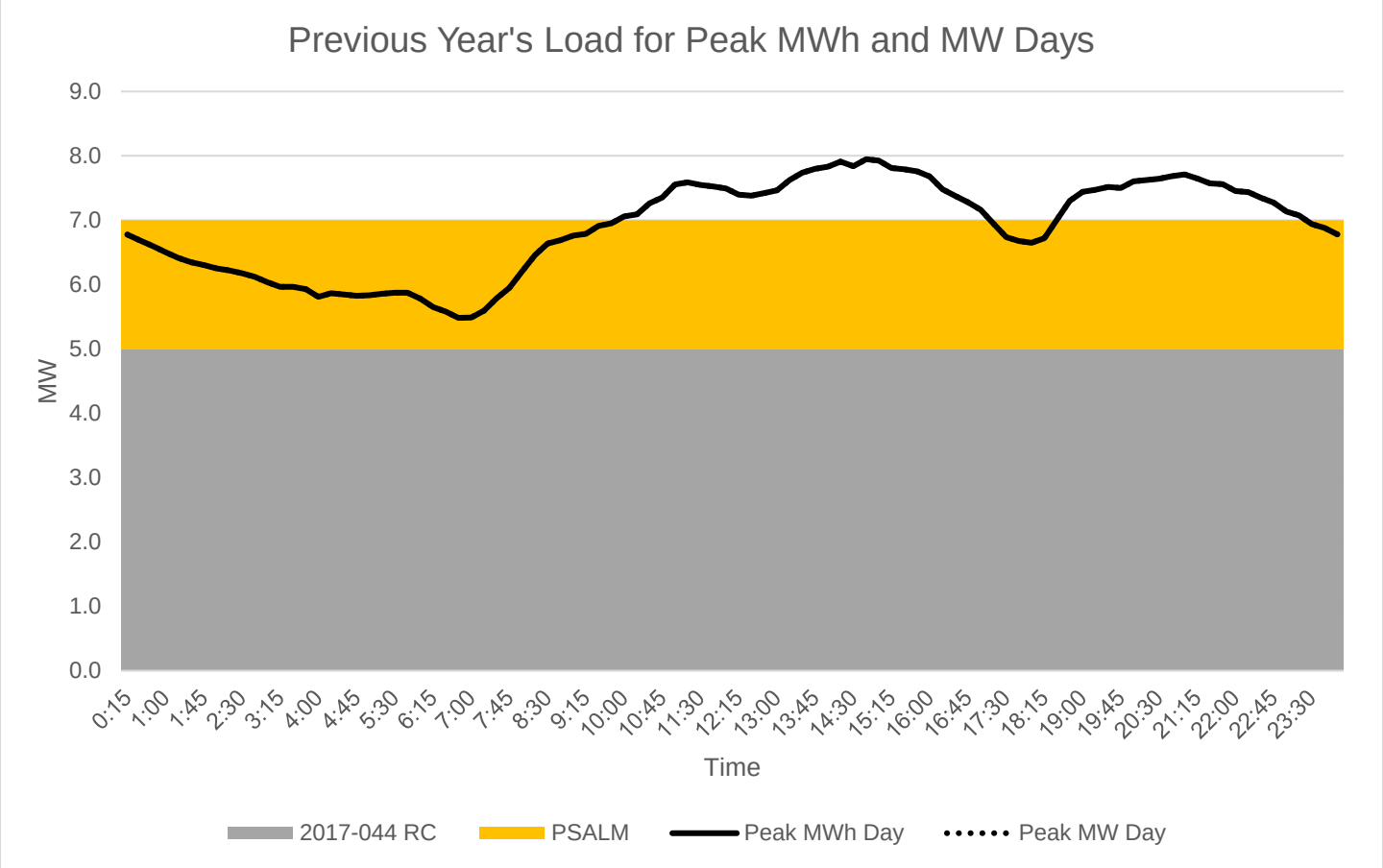



WESM Offtake decreased from 9,178 MWh in 2021 to 6,759 MWh in 2022 at a rate of 26.35% due to the effect of COVID-19 pandemic. The share of WESM in the total Offtake ranged from 1.204% to 34.872%.

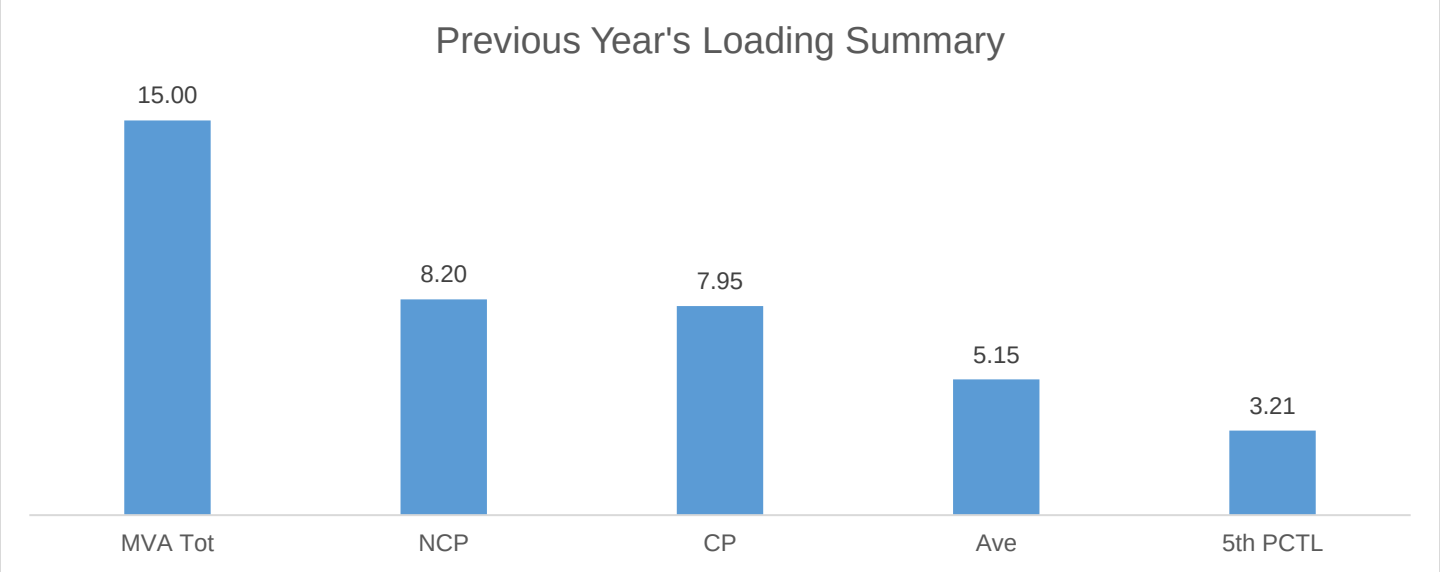
## Previous Year's Load Profile




Based on the Load Duration Curve, the minimum load is 0 MW and the maximum load is 7.947 MW for the last historical year.




Peak MW occurred on August 18, 2023 with 7.947 MW. Peak daily MWh also occurred on August 18, 2023 with 168.324 MWh. High temperature weather condition has a major impact for increase in MW and MWh during these periods. As shown in the Load Curves, the available supply is lower than the Peak Demand.




The Non-coincident Peak Demand is 8.20 MW, which is around 54.67% of the total substation capacity of 15 MVA at a power factor of 97.24%. The load factor or the ratio between the Average Load of 5.15 MW and the Non-coincident Peak Demand is 62.86%. A safe estimate of the true minimum load is the fifth percentile load of 3.21 MW which is 39.19% of the Non-coincident Peak Demand.

| Metering Point | Substation MVA | Substation Peak MW |
|---|---|---|
| Comon | 10 | 5.983 |
| Capalong | 5 | 2.217 |

Quezelco II uprated the 5 MVA Comon Substation to 10 MVA last January 2020.

# Forecasted Consumption Data

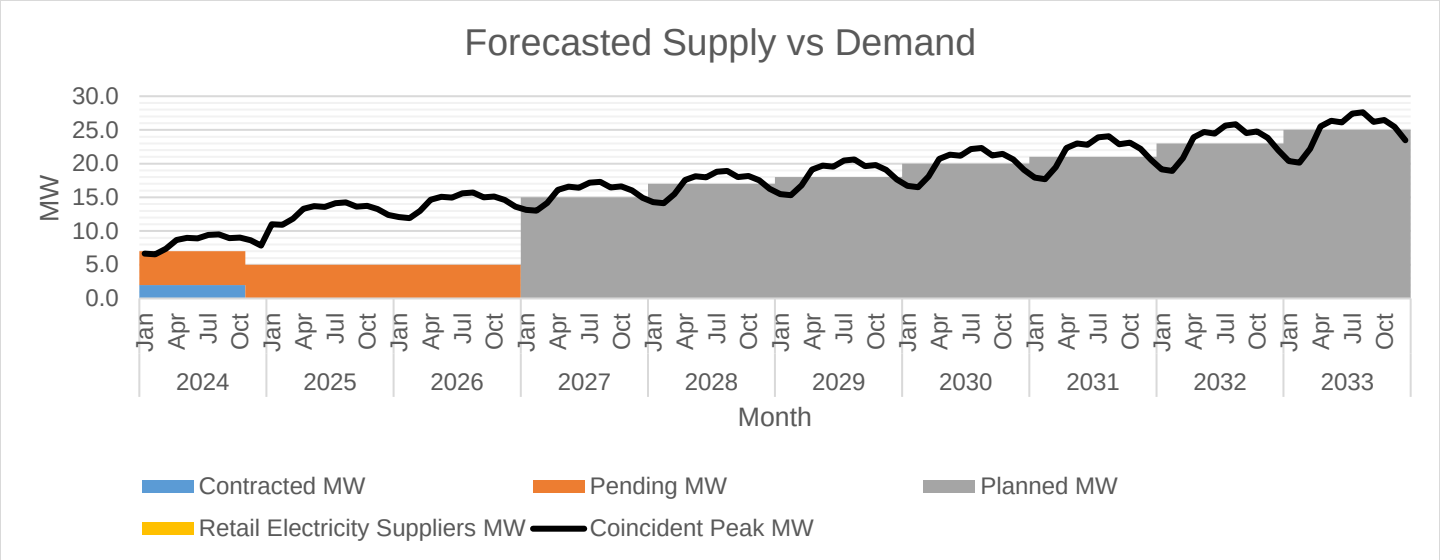
| | | Coincident Peak MW | Contracted MW | Pending MW | Planned MW | Retail Electricity Suppliers MW | Existing Contracting Level | Target Contracting Level | MW Surplus / Deficit |
|---|---|---|---|---|---|---|---|---|---|
| 2024 | Jan | 6.65 | 2.00 | 5.00 | 0.000 | | 30% | 105% | 0.35 |
| | Feb | 6.55 | 2.00 | 5.00 | 0.000 | | 31% | 107% | 0.45 |
| | Mar | 7.36 | 2.00 | 5.00 | 0.000 | | 27% | 95% | -0.36 |
| | Apr | 8.67 | 2.00 | 5.00 | 0.000 | | 23% | 81% | -1.67 |
| | May | 8.99 | 2.00 | 5.00 | 0.000 | | 22% | 78% | -1.99 |
| | Jun | 8.90 | 2.00 | 5.00 | 0.000 | | 22% | 79% | -1.90 |
| | Jul | 9.41 | 2.00 | 5.00 | 0.000 | | 21% | 74% | -2.41 |
| | Aug | 9.49 | 2.00 | 5.00 | 0.000 | | 21% | 74% | -2.49 |
| | Sep | 8.93 | 2.00 | 5.00 | 0.000 | | 22% | 78% | -1.93 |
| | Oct | 9.03 | 2.00 | 5.00 | 0.000 | | 22% | 77% | -2.03 |
| | Nov | 8.63 | 0.00 | 5.00 | 0.000 | | 0% | 58% | -3.63 |
| | Dec | 7.85 | 0.00 | 5.00 | 0.000 | | 0% | 64% | -2.85 |
| 2025 | Jan | 11.02 | 0.00 | 5.00 | 0.000 | | 0% | 45% | -6.02 |
| | Feb | 10.91 | 0.00 | 5.00 | 0.000 | | 0% | 46% | -5.91 |
| | Mar | 11.82 | 0.00 | 5.00 | 0.000 | | 0% | 42% | -6.82 |
| | Apr | 13.31 | 0.00 | 5.00 | 0.000 | | 0% | 38% | -8.31 |
| | May | 13.68 | 0.00 | 5.00 | 0.000 | | 0% | 37% | -8.68 |
| | Jun | 13.57 | 0.00 | 5.00 | 0.000 | | 0% | 37% | -8.57 |
| | Jul | 14.15 | 0.00 | 5.00 | 0.000 | | 0% | 35% | -9.15 |
| | Aug | 14.24 | 0.00 | 5.00 | 0.000 | | 0% | 35% | -9.24 |
| | Sep | 13.61 | 0.00 | 5.00 | 0.000 | | 0% | 37% | -8.61 |
| | Oct | 13.72 | 0.00 | 5.00 | 0.000 | | 0% | 36% | -8.72 |
| | Nov | 13.26 | 0.00 | 5.00 | 0.000 | | 0% | 38% | -8.26 |
| | Dec | 12.39 | 0.00 | 5.00 | 0.000 | | 0% | 40% | -7.39 |
| 2026 | Jan | 12.06 | 0.00 | 5.00 | 0.000 | | 0% | 41% | -7.06 |
| | Feb | 11.93 | 0.00 | 5.00 | 0.000 | | 0% | 42% | -6.93 |
| | Mar | 12.97 | 0.00 | 5.00 | 0.000 | | 0% | 39% | -7.97 |
| | Apr | 14.66 | 0.00 | 5.00 | 0.000 | | 0% | 34% | -9.66 |
| | May | 15.08 | 0.00 | 5.00 | 0.000 | | 0% | 33% | -10.08 |

| | | Coincident Peak MW | Contracted MW | Pending MW | Planned MW | Retail Electricity Suppliers MW | Existing Contracting Level | Target Contracting Level | MW Surplus / Deficit |
|---|---|---|---|---|---|---|---|---|---|
| | Jun | 14.96 | 0.00 | 5.00 | 0.000 | | 0% | 33% | -9.96 |
| | Jul | 15.61 | 0.00 | 5.00 | 0.000 | | 0% | 32% | -10.61 |
| | Aug | 15.71 | 0.00 | 5.00 | 0.000 | | 0% | 32% | -10.71 |
| | Sep | 15.00 | 0.00 | 5.00 | 0.000 | | 0% | 33% | -10.00 |
| | Oct | 15.13 | 0.00 | 5.00 | 0.000 | | 0% | 33% | -10.13 |
| | Nov | 14.61 | 0.00 | 5.00 | 0.000 | | 0% | 34% | -9.61 |
| | Dec | 13.61 | 0.00 | 5.00 | 0.000 | | 0% | 37% | -8.61 |
| 2027 | Jan | 13.16 | 0.00 | 0.00 | 15.000 | | 0% | 114% | 1.84 |
| | Feb | 13.01 | 0.00 | 0.00 | 15.000 | | 0% | 115% | 1.99 |
| | Mar | 14.19 | 0.00 | 0.00 | 15.000 | | 0% | 106% | 0.81 |
| | Apr | 16.09 | 0.00 | 0.00 | 15.000 | | 0% | 93% | -1.09 |
| | May | 16.57 | 0.00 | 0.00 | 15.000 | | 0% | 91% | -1.57 |
| | Jun | 16.43 | 0.00 | 0.00 | 15.000 | | 0% | 91% | -1.43 |
| | Jul | 17.17 | 0.00 | 0.00 | 15.000 | | 0% | 87% | -2.17 |
| | Aug | 17.28 | 0.00 | 0.00 | 15.000 | | 0% | 87% | -2.28 |
| | Sep | 16.48 | 0.00 | 0.00 | 15.000 | | 0% | 91% | -1.48 |
| | Oct | 16.63 | 0.00 | 0.00 | 15.000 | | 0% | 90% | -1.63 |
| | Nov | 16.03 | 0.00 | 0.00 | 15.000 | | 0% | 94% | -1.03 |
| | Dec | 14.91 | 0.00 | 0.00 | 15.000 | | 0% | 101% | 0.09 |
| 2028 | Jan | 14.31 | 0.00 | 0.00 | 17.000 | | 0% | 119% | 2.69 |
| | Feb | 14.14 | 0.00 | 0.00 | 17.000 | | 0% | 120% | 2.86 |
| | Mar | 15.46 | 0.00 | 0.00 | 17.000 | | 0% | 110% | 1.54 |
| | Apr | 17.59 | 0.00 | 0.00 | 17.000 | | 0% | 97% | -0.59 |
| | May | 18.12 | 0.00 | 0.00 | 17.000 | | 0% | 94% | -1.12 |
| | Jun | 17.97 | 0.00 | 0.00 | 17.000 | | 0% | 95% | -0.97 |
| | Jul | 18.79 | 0.00 | 0.00 | 17.000 | | 0% | 90% | -1.79 |
| | Aug | 18.92 | 0.00 | 0.00 | 17.000 | | 0% | 90% | -1.92 |
| | Sep | 18.02 | 0.00 | 0.00 | 17.000 | | 0% | 94% | -1.02 |
| | Oct | 18.19 | 0.00 | 0.00 | 17.000 | | 0% | 93% | -1.19 |
| | Nov | 17.52 | 0.00 | 0.00 | 17.000 | | 0% | 97% | -0.52 |
| | Dec | 16.27 | 0.00 | 0.00 | 17.000 | | 0% | 105% | 0.73 |

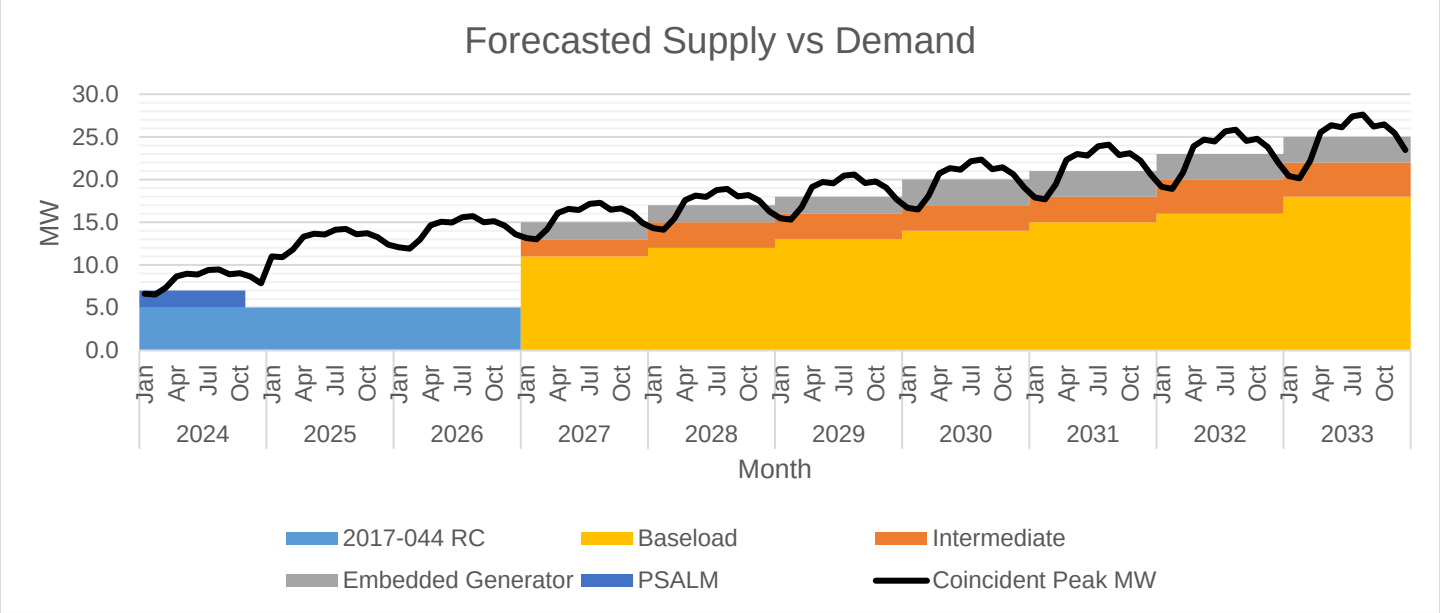
| | | Coincident Peak MW | Contracted MW | Pending MW | Planned MW | Retail Electricity Suppliers MW | Existing Contracting Level | Target Contracting Level | MW Surplus / Deficit |
|---|---|---|---|---|---|---|---|---|---|
| 2029 | Jan | 15.49 | 0.00 | 0.00 | 18.000 | | 0% | 116% | 2.51 |
| | Feb | 15.31 | 0.00 | 0.00 | 18.000 | | 0% | 118% | 2.69 |
| | Mar | 16.76 | 0.00 | 0.00 | 18.000 | | 0% | 107% | 1.24 |
| | Apr | 19.13 | 0.00 | 0.00 | 18.000 | | 0% | 94% | -1.13 |
| | May | 19.72 | 0.00 | 0.00 | 18.000 | | 0% | 91% | -1.72 |
| | Jun | 19.55 | 0.00 | 0.00 | 18.000 | | 0% | 92% | -1.55 |
| | Jul | 20.46 | 0.00 | 0.00 | 18.000 | | 0% | 88% | -2.46 |
| | Aug | 20.61 | 0.00 | 0.00 | 18.000 | | 0% | 87% | -2.61 |
| | Sep | 19.61 | 0.00 | 0.00 | 18.000 | | 0% | 92% | -1.61 |
| | Oct | 19.79 | 0.00 | 0.00 | 18.000 | | 0% | 91% | -1.79 |
| | Nov | 19.06 | 0.00 | 0.00 | 18.000 | | 0% | 94% | -1.06 |
| | Dec | 17.66 | 0.00 | 0.00 | 18.000 | | 0% | 102% | 0.34 |
| 2030 | Jan | 16.70 | 0.00 | 0.00 | 20.000 | | 0% | 120% | 3.30 |
| | Feb | 16.50 | 0.00 | 0.00 | 20.000 | | 0% | 121% | 3.50 |
| | Mar | 18.10 | 0.00 | 0.00 | 20.000 | | 0% | 111% | 1.90 |
| | Apr | 20.71 | 0.00 | 0.00 | 20.000 | | 0% | 97% | -0.71 |
| | May | 21.35 | 0.00 | 0.00 | 20.000 | | 0% | 94% | -1.35 |
| | Jun | 21.17 | 0.00 | 0.00 | 20.000 | | 0% | 94% | -1.17 |
| | Jul | 22.17 | 0.00 | 0.00 | 20.000 | | 0% | 90% | -2.17 |
| | Aug | 22.33 | 0.00 | 0.00 | 20.000 | | 0% | 90% | -2.33 |
| | Sep | 21.23 | 0.00 | 0.00 | 20.000 | | 0% | 94% | -1.23 |
| | Oct | 21.43 | 0.00 | 0.00 | 20.000 | | 0% | 93% | -1.43 |
| | Nov | 20.62 | 0.00 | 0.00 | 20.000 | | 0% | 97% | -0.62 |
| | Dec | 19.09 | 0.00 | 0.00 | 20.000 | | 0% | 105% | 0.91 |
| 2031 | Jan | 17.92 | 0.00 | 0.00 | 21.000 | | 0% | 117% | 3.08 |
| | Feb | 17.70 | 0.00 | 0.00 | 21.000 | | 0% | 119% | 3.30 |
| | Mar | 19.45 | 0.00 | 0.00 | 21.000 | | 0% | 108% | 1.55 |
| | Apr | 22.30 | 0.00 | 0.00 | 21.000 | | 0% | 94% | -1.30 |
| | May | 23.00 | 0.00 | 0.00 | 21.000 | | 0% | 91% | -2.00 |
| | Jun | 22.81 | 0.00 | 0.00 | 21.000 | | 0% | 92% | -1.81 |
| | Jul | 23.90 | 0.00 | 0.00 | 21.000 | | 0% | 88% | -2.90 |

| | | Coincident Peak MW | Contracted MW | Pending MW | Planned MW | Retail Electricity Suppliers MW | Existing Contracting Level | Target Contracting Level | MW Surplus / Deficit |
|---|---|---|---|---|---|---|---|---|---|
| | Aug | 24.08 | 0.00 | 0.00 | 21.000 | | 0% | 87% | -3.08 |
| | Sep | 22.88 | 0.00 | 0.00 | 21.000 | | 0% | 92% | -1.88 |
| | Oct | 23.09 | 0.00 | 0.00 | 21.000 | | 0% | 91% | -2.09 |
| | Nov | 22.21 | 0.00 | 0.00 | 21.000 | | 0% | 95% | -1.21 |
| | Dec | 20.53 | 0.00 | 0.00 | 21.000 | | 0% | 102% | 0.47 |
| 2032 | Jan | 19.16 | 0.00 | 0.00 | 23.000 | | 0% | 120% | 3.84 |
| | Feb | 18.92 | 0.00 | 0.00 | 23.000 | | 0% | 122% | 4.08 |
| | Mar | 20.82 | 0.00 | 0.00 | 23.000 | | 0% | 110% | 2.18 |
| | Apr | 23.91 | 0.00 | 0.00 | 23.000 | | 0% | 96% | -0.91 |
| | May | 24.68 | 0.00 | 0.00 | 23.000 | | 0% | 93% | -1.68 |
| | Jun | 24.46 | 0.00 | 0.00 | 23.000 | | 0% | 94% | -1.46 |
| | Jul | 25.65 | 0.00 | 0.00 | 23.000 | | 0% | 90% | -2.65 |
| | Aug | 25.84 | 0.00 | 0.00 | 23.000 | | 0% | 89% | -2.84 |
| | Sep | 24.54 | 0.00 | 0.00 | 23.000 | | 0% | 94% | -1.54 |
| | Oct | 24.77 | 0.00 | 0.00 | 23.000 | | 0% | 93% | -1.77 |
| | Nov | 23.82 | 0.00 | 0.00 | 23.000 | | 0% | 97% | -0.82 |
| | Dec | 21.99 | 0.00 | 0.00 | 23.000 | | 0% | 105% | 1.01 |
| 2033 | Jan | 20.40 | 0.00 | 0.00 | 25.000 | | 0% | 123% | 4.60 |
| | Feb | 20.14 | 0.00 | 0.00 | 25.000 | | 0% | 124% | 4.86 |
| | Mar | 22.20 | 0.00 | 0.00 | 25.000 | | 0% | 113% | 2.80 |
| | Apr | 25.53 | 0.00 | 0.00 | 25.000 | | 0% | 98% | -0.53 |
| | May | 26.36 | 0.00 | 0.00 | 25.000 | | 0% | 95% | -1.36 |
| | Jun | 26.13 | 0.00 | 0.00 | 25.000 | | 0% | 96% | -1.13 |
| | Jul | 27.41 | 0.00 | 0.00 | 25.000 | | 0% | 91% | -2.41 |
| | Aug | 27.62 | 0.00 | 0.00 | 25.000 | | 0% | 91% | -2.62 |
| | Sep | 26.21 | 0.00 | 0.00 | 25.000 | | 0% | 95% | -1.21 |
| | Oct | 26.46 | 0.00 | 0.00 | 25.000 | | 0% | 94% | -1.46 |
| | Nov | 25.43 | 0.00 | 0.00 | 25.000 | | 0% | 98% | -0.43 |
| | Dec | 23.46 | 0.00 | 0.00 | 25.000 | | 0% | 107% | 1.54 |

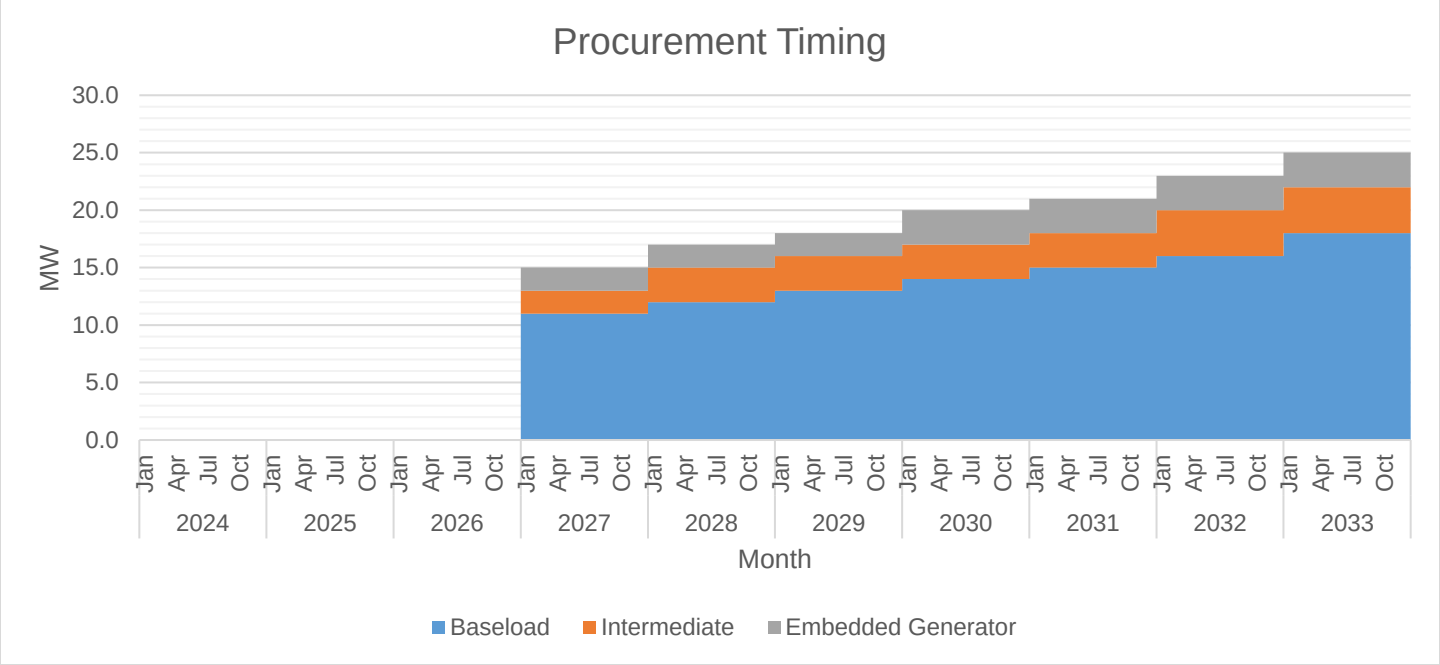
The Peak Demand was forecasted using Cubic and Logarithmic Trend with Horizon Method of Forecasting. Quezelco II uses Historical Data on this process. Peak Demand was forecasted to occur on the month of June due to summer season. Monthly Peak Demand is at its lowest on the month of February. Historically, summer season starts from month of April to September while rainy season starts from month of November to February. In general, Peak Demand is expected to grow at an average rate of 8.64% annually. In addition, MWSS is applying for connection to supply power to Kaliwa Dam with an estimated power demand of 3.5MW. There will be an increase in MW demand and MWH purchase which is expected to happen in year 2025.



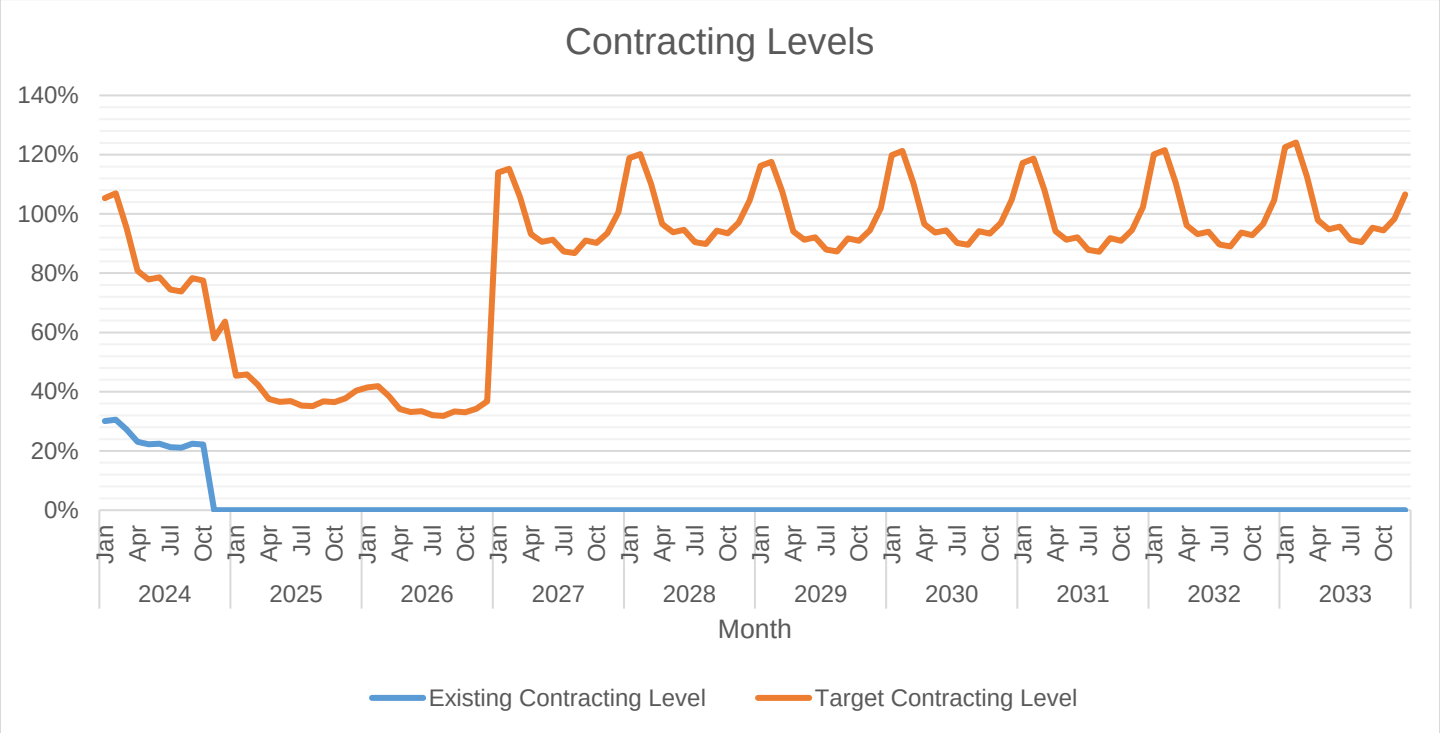

The available supply is generally below the Peak Demand until year 2026. Quezelco II is planning to request extension of power supply from PSALM to cover 2024-2026 power requirement. Quezelco II already uprated the Comon Substation from 5MVA to 10MVA last January 2020. This is to accommodate future big loads.



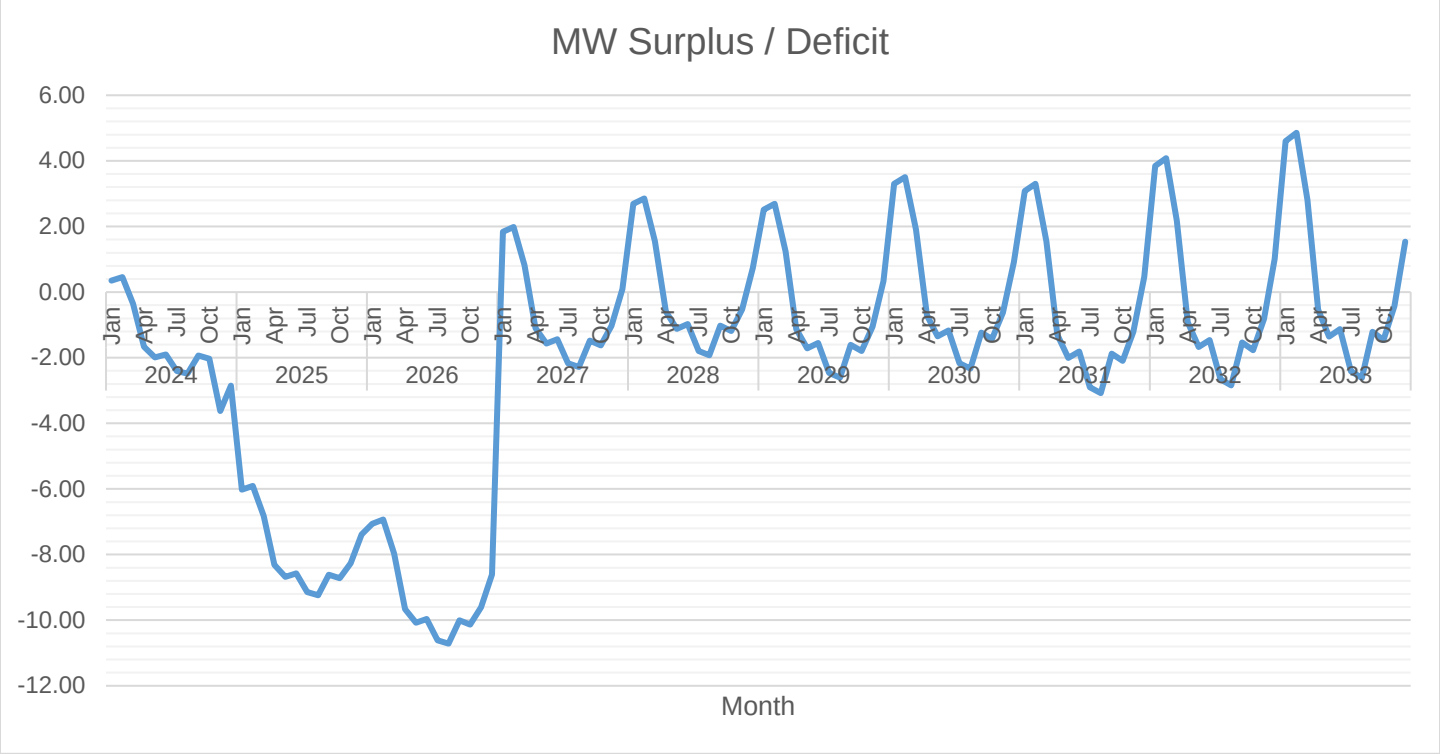

Of the available supply, the largest is 5MW from year 2024 to 2026. Quezelco II will conduct CSP for a new power supplier that will supply power starting year 2027 up to year 2041. Quezelco II is planning to put up embedded generator with a starting capacity of 2MW in year 2027.




The first wave of supply procurement will be for 2MW RE and 11MW non-RE planned to be available by the year 2027. This will be followed by 3MW RE and 12MW non-RE by the year 2028. This will be followed by 3MW RE and 13MW non-RE by the year 2029. This will be followed by 3MW RE and 14MW non-RE by the year 2030. This will be followed by 3MW RE and 15MW non-RE by the year 2031. This will be followed by 4MW RE and 16MW non-RE by the year 2032. This will be followed by 4MW RE and 18MW non-RE by the year 2033. For the embedded generator, 2MW will be installed from 2027 to 2029, 3MW from 2030 to 2033.




Currently, the existing contracting level is 30%. The highest target contracting level is 124% which is expected to occur in February 2033. The lowest target contracting level is 32% which is expected to occur in August 2026.




Currently, there is over-contracting by 0.35MW. The highest surplus is 4.86 MW which is expected to occur on the month of February 2033. The highest deficit is 10.71 MW which is expected to occur on the month of August 2026.

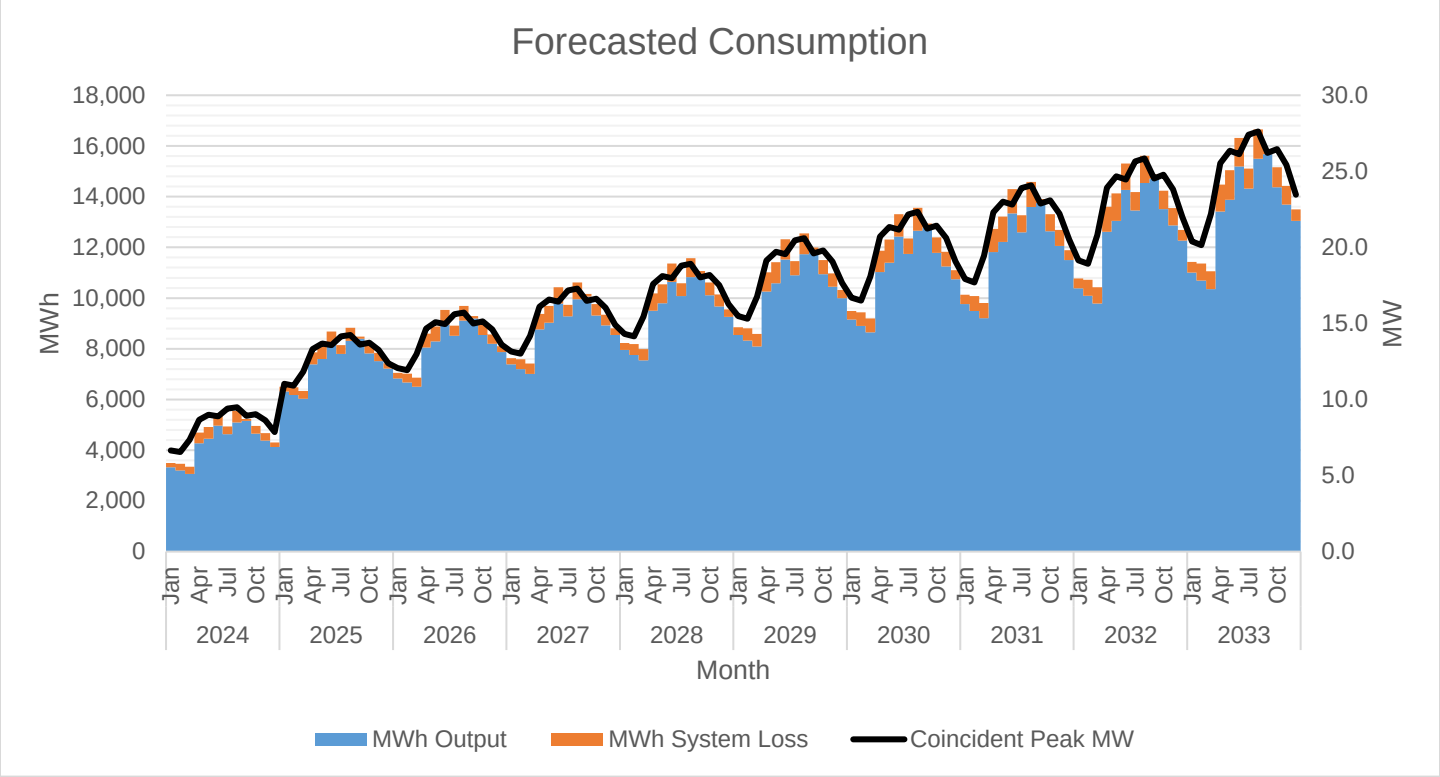
Due to the Yellow Alert advisory of the National Grid Corporation of the Philippines (NGCP), QUEZELCO II applied for Contract of Supply of Electric Energy (CSEE) with Power Sector Assets and Liabilities Management (PSALM) Corporation for One (1) year (November 2023 - October 2024). This is in order to avoid exposure to WESM especially this coming summer season while QUEZELCO II is processing its Competitive Selection Process (CSP) for additional load requirements.

| | | MWh Offtake | MWh Output | MWh System Loss | Transm'n Loss | System Loss |
|---|---|---|---|---|---|---|
| 2024 | Jan | 3,492 | 3,323 | 169 | 0.00% | 4.84% |
| | Feb | 3,467 | 3,198 | 268 | 0.00% | 7.74% |
| | Mar | 3,344 | 3,068 | 276 | 0.00% | 8.25% |
| | Apr | 4,691 | 4,270 | 421 | 0.00% | 8.97% |
| | May | 4,913 | 4,453 | 459 | 0.00% | 9.35% |
| | Jun | 5,415 | 4,972 | 443 | 0.00% | 8.18% |
| | Jul | 4,937 | 4,628 | 309 | 0.00% | 6.25% |
| | Aug | 5,545 | 5,090 | 455 | 0.00% | 8.20% |
| | Sep | 5,234 | 5,161 | 73 | 0.00% | 1.40% |
| | Oct | 4,958 | 4,650 | 309 | 0.00% | 6.23% |
| | Nov | 4,669 | 4,379 | 290 | 0.00% | 6.21% |
| | Dec | 4,305 | 4,125 | 180 | 0.00% | 4.18% |
| 2025 | Jan | 6,507 | 6,316 | 191 | 0.00% | 2.94% |
| | Feb | 6,479 | 6,175 | 304 | 0.00% | 4.69% |
| | Mar | 6,340 | 6,028 | 312 | 0.00% | 4.92% |
| | Apr | 7,864 | 7,388 | 476 | 0.00% | 6.06% |
| | May | 8,115 | 7,595 | 520 | 0.00% | 6.40% |
| | Jun | 8,684 | 8,183 | 501 | 0.00% | 5.77% |
| | Jul | 8,142 | 7,793 | 349 | 0.00% | 4.29% |
| | Aug | 8,830 | 8,316 | 515 | 0.00% | 5.83% |
| | Sep | 8,479 | 8,396 | 83 | 0.00% | 0.98% |
| | Oct | 8,167 | 7,817 | 350 | 0.00% | 4.28% |
| | Nov | 7,840 | 7,511 | 328 | 0.00% | 4.19% |
| | Dec | 7,427 | 7,224 | 203 | 0.00% | 2.74% |
| 2026 | Jan | 7,051 | 6,833 | 217 | 0.00% | 3.08% |
| | Feb | 7,018 | 6,673 | 346 | 0.00% | 4.93% |
| | Mar | 6,861 | 6,506 | 355 | 0.00% | 5.18% |
| | Apr | 8,595 | 8,053 | 542 | 0.00% | 6.30% |
| | May | 8,880 | 8,289 | 591 | 0.00% | 6.66% |
| | Jun | 9,528 | 8,957 | 570 | 0.00% | 5.98% |
| | Jul | 8,911 | 8,514 | 397 | 0.00% | 4.46% |
| | Aug | 9,694 | 9,108 | 586 | 0.00% | 6.04% |
| | Sep | 9,294 | 9,200 | 94 | 0.00% | 1.02% |
| | Oct | 8,939 | 8,542 | 398 | 0.00% | 4.45% |
| | Nov | 8,567 | 8,194 | 374 | 0.00% | 4.36% |
| | Dec | 8,098 | 7,866 | 231 | 0.00% | 2.86% |
| 2027 | Jan | 7,628 | 7,383 | 245 | 0.00% | 3.22% |
| | Feb | 7,592 | 7,202 | 390 | 0.00% | 5.14% |
| | Mar | 7,414 | 7,013 | 401 | 0.00% | 5.41% |
| | Apr | 9,371 | 8,760 | 611 | 0.00% | 6.52% |
| | May | 9,693 | 9,026 | 667 | 0.00% | 6.88% |
| | Jun | 10,424 | 9,780 | 643 | 0.00% | 6.17% |
| | Jul | 9,728 | 9,280 | 448 | 0.00% | 4.61% |

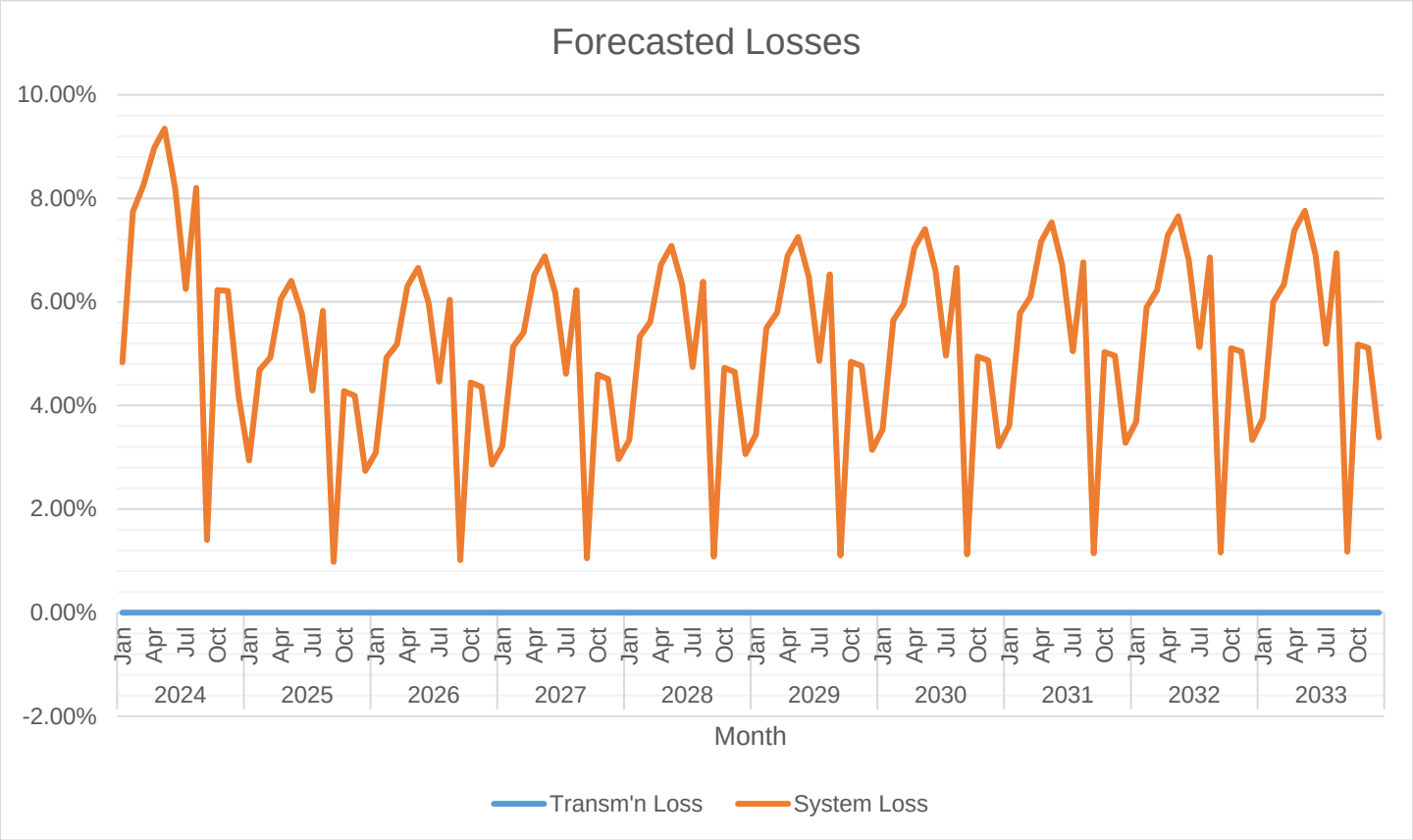
| | | MWh Offtake | MWh Output | MWh System Loss | Transm'n Loss | System Loss |
|---|---|---|---|---|---|---|
| | Aug | 10,612 | 9,951 | 661 | 0.00% | 6.23% |
| | Sep | 10,160 | 10,054 | 107 | 0.00% | 1.05% |
| | Oct | 9,760 | 9,311 | 449 | 0.00% | 4.60% |
| | Nov | 9,340 | 8,918 | 422 | 0.00% | 4.51% |
| | Dec | 8,810 | 8,549 | 261 | 0.00% | 2.96% |
| 2028 | Jan | 8,231 | 7,956 | 275 | 0.00% | 3.34% |
| | Feb | 8,191 | 7,754 | 436 | 0.00% | 5.33% |
| | Mar | 7,991 | 7,543 | 448 | 0.00% | 5.61% |
| | Apr | 10,181 | 9,497 | 684 | 0.00% | 6.72% |
| | May | 10,541 | 9,795 | 747 | 0.00% | 7.08% |
| | Jun | 11,358 | 10,639 | 720 | 0.00% | 6.34% |
| | Jul | 10,580 | 10,079 | 502 | 0.00% | 4.74% |
| | Aug | 11,569 | 10,829 | 739 | 0.00% | 6.39% |
| | Sep | 11,064 | 10,944 | 119 | 0.00% | 1.08% |
| | Oct | 10,616 | 10,114 | 502 | 0.00% | 4.73% |
| | Nov | 10,146 | 9,674 | 472 | 0.00% | 4.65% |
| | Dec | 9,553 | 9,261 | 292 | 0.00% | 3.06% |
| 2029 | Jan | 8,852 | 8,547 | 305 | 0.00% | 3.44% |
| | Feb | 8,807 | 8,323 | 484 | 0.00% | 5.50% |
| | Mar | 8,586 | 8,088 | 497 | 0.00% | 5.79% |
| | Apr | 11,015 | 10,256 | 759 | 0.00% | 6.89% |
| | May | 11,415 | 10,586 | 828 | 0.00% | 7.26% |
| | Jun | 12,321 | 11,523 | 799 | 0.00% | 6.48% |
| | Jul | 11,458 | 10,901 | 557 | 0.00% | 4.86% |
| | Aug | 12,554 | 11,734 | 820 | 0.00% | 6.53% |
| | Sep | 11,994 | 11,862 | 132 | 0.00% | 1.10% |
| | Oct | 11,497 | 10,940 | 557 | 0.00% | 4.84% |
| | Nov | 10,976 | 10,453 | 523 | 0.00% | 4.77% |
| | Dec | 10,318 | 9,994 | 324 | 0.00% | 3.14% |
| 2030 | Jan | 9,486 | 9,150 | 335 | 0.00% | 3.53% |
| | Feb | 9,436 | 8,903 | 533 | 0.00% | 5.65% |
| | Mar | 9,193 | 8,645 | 548 | 0.00% | 5.96% |
| | Apr | 11,866 | 11,031 | 835 | 0.00% | 7.04% |
| | May | 12,306 | 11,395 | 912 | 0.00% | 7.41% |
| | Jun | 13,304 | 12,425 | 879 | 0.00% | 6.61% |
| | Jul | 12,354 | 11,741 | 613 | 0.00% | 4.96% |
| | Aug | 13,561 | 12,658 | 903 | 0.00% | 6.66% |
| | Sep | 12,944 | 12,799 | 146 | 0.00% | 1.13% |
| | Oct | 12,397 | 11,784 | 613 | 0.00% | 4.94% |
| | Nov | 11,824 | 11,248 | 576 | 0.00% | 4.87% |
| | Dec | 11,100 | 10,743 | 357 | 0.00% | 3.21% |
| 2031 | Jan | 10,128 | 9,762 | 366 | 0.00% | 3.62% |
| | Feb | 10,075 | 9,492 | 582 | 0.00% | 5.78% |

| | | MWh Offtake | MWh Output | MWh System Loss | Transm'n Loss | System Loss |
|---|---|---|---|---|---|---|
| | Mar | 9,809 | 9,210 | 598 | 0.00% | 6.10% |
| | Apr | 12,730 | 11,818 | 913 | 0.00% | 7.17% |
| | May | 13,211 | 12,215 | 996 | 0.00% | 7.54% |
| | Jun | 14,301 | 13,341 | 961 | 0.00% | 6.72% |
| | Jul | 13,263 | 12,594 | 670 | 0.00% | 5.05% |
| | Aug | 14,582 | 13,595 | 987 | 0.00% | 6.77% |
| | Sep | 13,908 | 13,749 | 159 | 0.00% | 1.14% |
| | Oct | 13,310 | 12,641 | 670 | 0.00% | 5.03% |
| | Nov | 12,683 | 12,054 | 629 | 0.00% | 4.96% |
| | Dec | 11,892 | 11,503 | 390 | 0.00% | 3.28% |
| 2032 | Jan | 10,778 | 10,380 | 398 | 0.00% | 3.69% |
| | Feb | 10,719 | 10,087 | 632 | 0.00% | 5.90% |
| | Mar | 10,431 | 9,781 | 650 | 0.00% | 6.23% |
| | Apr | 13,603 | 12,612 | 991 | 0.00% | 7.29% |
| | May | 14,124 | 13,043 | 1,082 | 0.00% | 7.66% |
| | Jun | 15,308 | 14,265 | 1,043 | 0.00% | 6.81% |
| | Jul | 14,181 | 13,454 | 727 | 0.00% | 5.13% |
| | Aug | 15,613 | 14,542 | 1,071 | 0.00% | 6.86% |
| | Sep | 14,881 | 14,709 | 173 | 0.00% | 1.16% |
| | Oct | 14,232 | 13,505 | 727 | 0.00% | 5.11% |
| | Nov | 13,552 | 12,868 | 683 | 0.00% | 5.04% |
| | Dec | 12,693 | 12,270 | 423 | 0.00% | 3.33% |
| 2033 | Jan | 11,431 | 11,001 | 429 | 0.00% | 3.76% |
| | Feb | 11,368 | 10,685 | 682 | 0.00% | 6.00% |
| | Mar | 11,056 | 10,355 | 701 | 0.00% | 6.34% |
| | Apr | 14,480 | 13,410 | 1,070 | 0.00% | 7.39% |
| | May | 15,043 | 13,876 | 1,167 | 0.00% | 7.76% |
| | Jun | 16,321 | 15,196 | 1,126 | 0.00% | 6.90% |
| | Jul | 15,105 | 14,320 | 785 | 0.00% | 5.19% |
| | Aug | 16,650 | 15,494 | 1,156 | 0.00% | 6.94% |
| | Sep | 15,860 | 15,674 | 187 | 0.00% | 1.18% |
| | Oct | 15,160 | 14,375 | 785 | 0.00% | 5.18% |
| | Nov | 14,425 | 13,688 | 737 | 0.00% | 5.11% |
| | Dec | 13,498 | 13,041 | 457 | 0.00% | 3.39% |

MWh Offtake was forecasted using the forecasted MW Peak Demand. The assumed average load factor is 71.53%. QUEZELCO II has no transmission line. Sub transmission line from Famy, Laguna going to Real and Infanta, Quezon is owned and operated by NGCP.




MWh Output was expected to grow at an average rate of 7.89% annually.



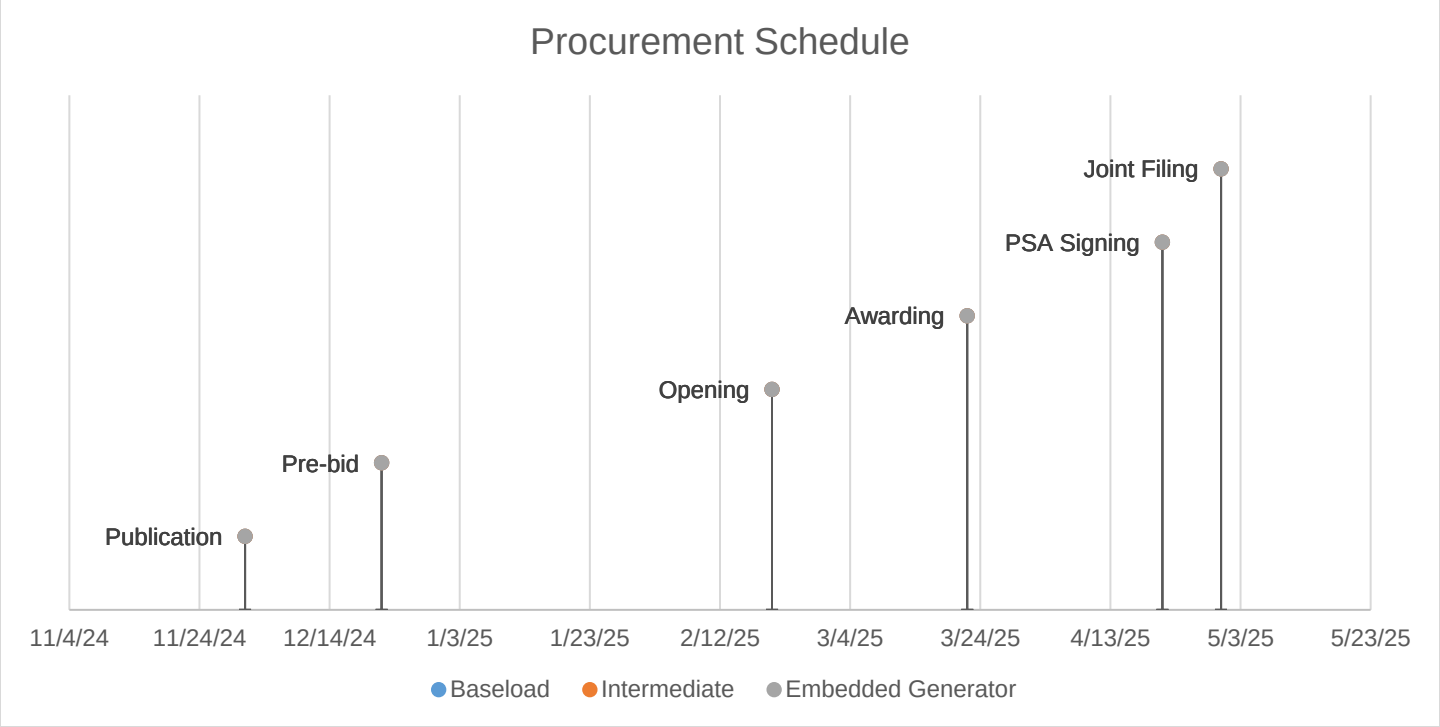

Annual System Loss is expected to range from 6.64% down to 4.45%.

# Power Supply

| Case No. | Type | GenCo | Minimum MW | Minimum MWh/yr | PSA Start | PSA End |
|---|---|---|---|---|---|---|
| 2017-044 RC | Base | GN Power Dinginin | 5.00 | 26,927 | 12/26/2019 | 12/25/2026 |

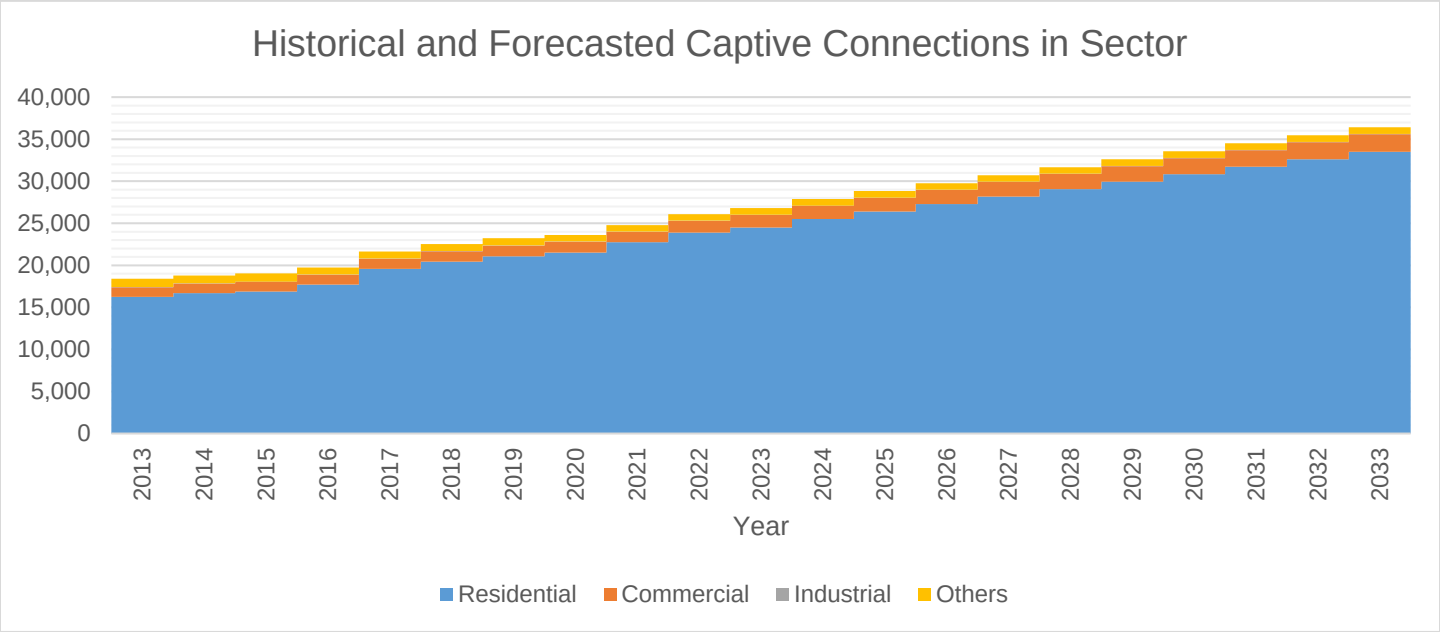
The PSA with GN Power filed with ERC under Case No. 2017-044 RC was procured through competitive bidding. It was selected to provide for base requirements due to load characteristics of Quezelco II, majority residential loads. Historically, the utilization of the PSA is 133%. The actual billed overall monthly charge under the PSA ranged from 4.7076 P/kWh to 6.1522 P/KWh in the same period. The PSA between QUEZELCO II and GN Power Mariveles (2016-2019) and GN Power Dinginin Ltd. (2020-2026) has Provisional Authority (PA) from the Energy Regulatory Commission. The prepared Terms of Reference is aligned with 2023 PSPP and 2023 DDP. PSA with PSALM to provide additional 2 MW power requirement started in October 26, 2023 and will end in October 25, 2024.

| | Baseload | Intermediate | Embedded Generator |
|---|---|---|---|
| Type | Baseload | Intermediate | Peaking |
| Minimum MW | 11.00 | 2.00 | 2.00 |
| Minimum MWh/yr | 93,862 | 5,037 | 359 |
| Maximum MW | 27.00 | 6.00 | 5.00 |
| Maximum MWh/yr | 214,379 | 11,505 | 819 |
| PSA Start | 12/26/2026 | 12/26/2026 | 12/26/2026 |
| PSA End | 12/25/2041 | 12/25/2041 | 12/25/2041 |
| Publication | 12/1/2024 | 12/1/2024 | 12/1/2024 |
| Pre-bid | 12/22/2024 | 12/22/2024 | 12/22/2024 |
| Opening | 2/20/2025 | 2/20/2025 | 2/20/2025 |
| Awarding | 3/22/2025 | 3/22/2025 | 3/22/2025 |
| PSA Signing | 4/21/2025 | 4/21/2025 | 4/21/2025 |
| Joint Filing | 4/30/2025 | 4/30/2025 | 4/30/2025 |




For the procurement of 2MW RE and 11MW non-RE of supply, which is planned to be available in 2027, the first publication or launch of CSP will be on December 01, 2024. Joint filing is planned on April 30, 2025, or 150 days later, in accordance with the DOE 2023 CSP Policy and ERC 2023 CSP Implementing Rules. For the planned embedded generator, which is planned to be available in 2027, the first publication or lunch will be on December 1, 2024. Joint filing is planned on April 30, 2025, or 150 days later, in accordance with the DOE 2023 CSP Policy and ERC 2023 CSP Implementing Rules.

# Captive Customer Connections




The number of Residential connections is expected to grow at an average rate of 3.07% annually. Said customer class is expected to account for 65.03% of the total consumption.

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