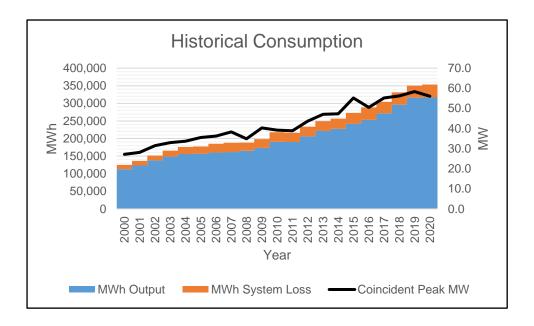
Power Supply Procurement Plan 2021

ILOCOS NORTE ELECTRIC COOPERATIVE, INC.

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 | 27.14 | 125,012 | 0 | 125,012 | 112,636 | 12,375 | 53% | 0.00% | 0.00% | 9.90% |
| 2001 | 28.14 | 136,387 | 0 | 136,387 | 123,345 | 13,043 | 55% | 0.00% | 0.00% | 9.56% |
| 2002 | 31.44 | 151,644 | 0 | 151,644 | 137,924 | 13,720 | 55% | 0.00% | 0.00% | 9.05% |
| 2003 | 32.97 | 165,706 | 0 | 165,706 | 148,791 | 16,915 | 57% | 0.00% | 0.00% | 10.21% |
| 2004 | 33.69 | 176,093 | 0 | 176,093 | 155,917 | 20,175 | 60% | 0.00% | 0.00% | 11.46% |
| 2005 | 35.49 | 177,307 | 0 | 177,307 | 157,092 | 20,214 | 57% | 0.00% | 0.00% | 11.40% |
| 2006 | 36.24 | 185,292 | 0 | 185,292 | 160,208 | 25,084 | 58% | 0.00% | 0.00% | 13.54% |
| 2007 | 38.32 | 188,039 | 0 | 188,039 | 161,363 | 26,677 | 56% | 0.00% | 0.00% | 14.19% |
| 2008 | 34.91 | 188,489 | 0 | 188,489 | 165,173 | 23,316 | 62% | 0.00% | 0.00% | 12.37% |
| 2009 | 40.28 | 198,520 | 0 | 198,520 | 173,390 | 25,130 | 56% | 0.00% | 0.00% | 12.66% |
| 2010 | 39.21 | 217,710 | 0 | 217,710 | 190,815 | 26,894 | 63% | 0.00% | 0.00% | 12.35% |
| 2011 | 38.85 | 216,563 | 0 | 216,563 | 190,023 | 26,540 | 64% | 0.00% | 0.00% | 12.26% |
| 2012 | 43.61 | 233,708 | 0 | 233,708 | 206,234 | 27,475 | 61% | 0.00% | 0.00% | 11.76% |
| 2013 | 47.04 | 249,135 | 0 | 249,135 | 221,524 | 27,611 | 60% | 0.00% | 0.00% | 11.08% |
| 2014 | 47.28 | 256,416 | 0 | 256,416 | 227,304 | 29,112 | 62% | 0.00% | 0.00% | 11.35% |
| 2015 | 55.15 | 272,908 | 0 | 272,908 | 241,537 | 31,371 | 56% | 0.00% | 0.00% | 11.50% |
| 2016 | 50.50 | 301,666 | 0 | 301,463 | 252,906 | 35,705 | 68% | -4.26% | 0.07% | 11.84% |
| 2017 | 55.19 | 318,720 | 0 | 318,471 | 271,551 | 32,917 | 66% | -4.40% | 0.08% | 10.34% |
| 2018 | 56.22 | 331,682 | -35,139 | 331,326 | 295,972 | 35,354 | 67% | 0.00% | 0.11% | 10.67% |
| 2019 | 58.34 | 350,455 | -63,474 | 350,132 | 316,225 | 33,907 | 69% | 0.00% | 0.09% | 9.68% |
| 2020 | 56.09 | 353,921 | -50,930 | 353,514 | 316,521 | 36,993 | 72% | 0.00% | 0.12% | 10.46% |

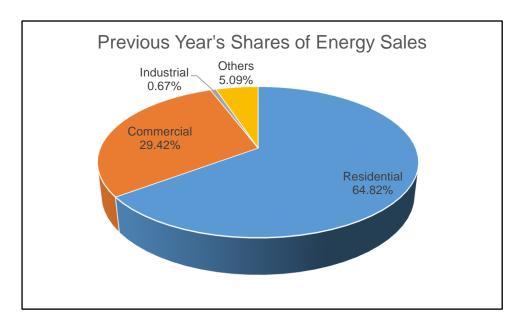
Peak Demand decreased from 58.34 MW in 2019 to 56.09 MW in 2020 at a rate of 3.77% due to all commercial establishments and public buildings was closed during lockdown caused by the pandemic last 2020. MWh Offtake increased from 350,455 MWh in 2019 to 353,921 MWh in 2020 at a rate of 0.99%. Within the same period, Load Factor ranged from 69% to 72%, because residential loads was increased during quarantine periods. There was slight increase in consumption on 2020 due to the experienced of pandemic.



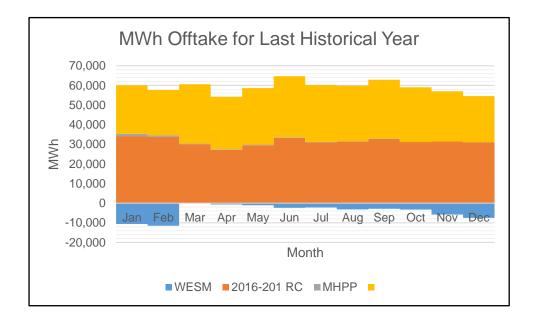
MWh Output increased from year 2019 to year 2020 at a rate of 0.09%, while MWh System Loss increased at a rate of 8.06% within the same period.



Historically, Transmission Loss ranged from 0.07% to 0.12% while System Loss ranged from 9.05% to 14.19%. Transmission Loss peaked at 0.12% on year 2020. System Loss peaked at 14.19% on year 2017.

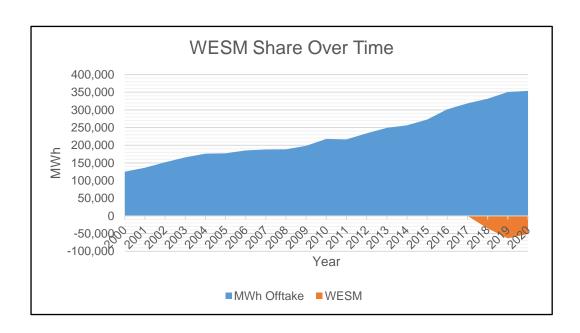


Residential customers account for the bulk of energy sales at 64.82% due to the high number of connections and the trending usage of air-condition units in the households. In contrast, industrial customers accounted for only 0.70% of energy sales due to the low number of connections.



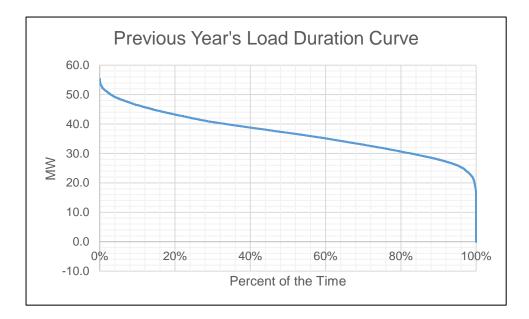
For 2020, the total Offtake for the last historical year is within the quantity stipulated in the PSA.

The PSA with 70% to 100% Capacity Utilization Factor (CUF) accounts for the bulk of MWh Offtake.

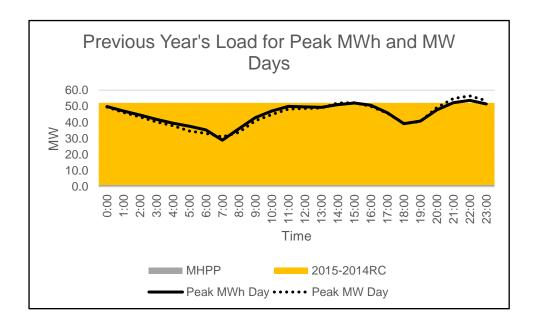


WESM Offtake decreased from 8,419 MWh in 2019 to 3,057 MWh in 2020 at a rate of 64% due to sufficient contracted capacity. The share of WESM in the total Offtake ranged from 1% to 10%. The net WESM transaction is negative from 63,474 MWh to 50,930 MWh because there was an excess energy during off-peak months.

Previous Year's Load Profile

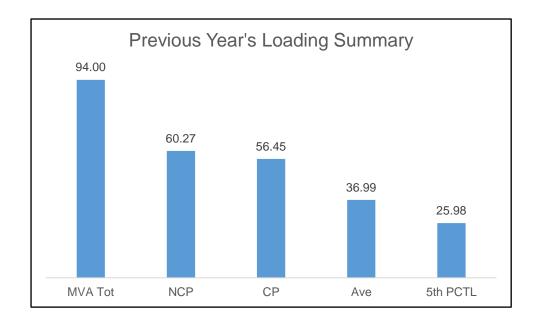


Based on the Load Duration Curve, the minimum load is 16.32 MW and the maximum load is 56.45 MW for the last historical year.



Peak MW occurs on hour 22 where the load consumption is high. Peak daily MWh also occurs on the same hour. This is when the usage electricity is greatest due to the usage of lighting and most of households open their TV sets, utilize their electric fans and air-condition units. This is due to the fact that residential connection makes up 85% of its total connection.

As shown in the Load Curve, the available supply is lower than the Peak Demand.



The Non-coincident Peak Demand is 60.27 MW, which is around 64.12% of the total substation capacity of 94 MVA at a power factor of 98.47%. The load factor or the ratio between the Average Load of 36.99 MW and the Non-coincident Peak Demand is 65.55% of. A safe estimate of the true minimum load is the fifth percentile load of 25.98 MW which is 43.12% of the Non-coincident Peak Demand.

| Metering Point | Substation MVA | Substation Peak MW |
|-----------------------------|----------------|--------------------|
| MARTAN(MF3MLAOINEC01) | 35 | 24.234 |
| CURRIMAO(MF3MCURINEC03) | 10 | 6.405 |
| SAN NICOLAS (MF3MCURINEC04) | 15 | 9.141 |
| BATAC(MF3MCURINEC05) | 10 | 6.585 |
| BURGOS(MF3MLAOINEC06) | 12 | 5.965 |
| LAOAG 3(MF3MLAOINEC08) | 10 | 6.516 |
| MHPP | 2 | 1.428 |

The substations loaded nearest to 70% are Batac and Martan. These loading problems will be solved by additional capacity in the respective areas.

Forecasted Consumption Data

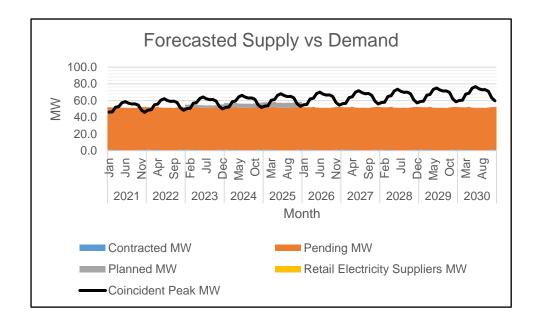
| | | Coincident Peak MW | Contracted MW | Pending MW | Planned MW | Retail Electricity Suppliers MW | Existing Contracting Level | Target Contracting Level | MW Surplus / Deficit |
|------|-----|-----------------------|---------------|------------|------------|--|----------------------------------|--------------------------------|-------------------------|
| 2021 | Jan | 46.10 | 1.16 | 51.00 | 0.000 | | 3% | 113% | 6.07 |
| | Feb | 46.44 | 0.89 | 51.00 | 0.000 | | 2% | 112% | 5.45 |
| | Mar | 52.04 | 0.91 | 51.00 | 0.000 | | 2% | 100% | -0.13 |
| | Apr | 52.81 | 1.43 | 51.00 | 0.000 | | 3% | 99% | -0.38 |
| | May | 57.38 | 0.53 | 51.00 | 0.000 | | 1% | 90% | -5.85 |
| | Jun | 58.87 | 0.36 | 51.00 | 0.000 | | 1% | 87% | -7.51 |
| | Jul | 56.95 | 0.26 | 51.00 | 0.000 | | 0% | 90% | -5.68 |
| | Aug | 55.92 | 0.37 | 51.00 | 0.000 | | 1% | 92% | -4.54 |
| | Sep | 56.17 | 0.17 | 51.00 | 0.000 | | 0% | 91% | -5.00 |
| | Oct | 54.53 | 0.65 | 51.00 | 0.000 | | 1% | 95% | -2.88 |
| | Nov | 48.61 | 1.17 | 51.00 | 0.000 | | 2% | 107% | 3.56 |
| | Dec | 45.89 | 1.54 | 51.00 | 0.000 | | 3% | 114% | 6.65 |
| 2022 | Jan | 48.68 | 1.16 | 51.00 | 0.000 | | 2% | 107% | 3.49 |
| | Feb | 49.04 | 0.89 | 51.00 | 0.000 | | 2% | 106% | 2.85 |
| | Mar | 54.96 | 0.91 | 51.00 | 0.000 | | 2% | 94% | -3.04 |
| | Apr | 55.77 | 1.43 | 51.00 | 0.000 | | 3% | 94% | -3.34 |
| | May | 60.60 | 0.53 | 51.00 | 0.000 | | 1% | 85% | -9.07 |
| | Jun | 62.16 | 0.36 | 51.00 | 0.000 | | 1% | 83% | -10.80 |
| | Jul | 60.14 | 0.26 | 51.00 | 0.000 | | 0% | 85% | -8.87 |
| | Aug | 59.05 | 0.37 | 51.00 | 0.000 | | 1% | 87% | -7.67 |
| | Sep | 59.31 | 0.17 | 51.00 | 0.000 | | 0% | 86% | -8.15 |
| | Oct | 57.58 | 0.65 | 51.00 | 0.000 | | 1% | 90% | -5.93 |
| | Nov | 51.34 | 1.17 | 51.00 | 0.000 | | 2% | 102% | 0.84 |
| | Dec | 48.46 | 1.54 | 51.00 | 0.000 | | 3% | 108% | 4.08 |
| 2023 | Jan | 50.34 | 1.16 | 51.00 | 3.000 | | 2% | 110% | 4.83 |
| | Feb | 50.71 | 0.89 | 51.00 | 3.000 | | 2% | 108% | 4.18 |
| | Mar | 56.83 | 0.91 | 51.00 | 3.000 | | 2% | 97% | -1.92 |

| | Apr | 57.67 | 1.43 | 51.00 | 3.000 | 2% | 96% | -2.24 |
|------|-----|-------|------|-------|-------|----|------|--------|
| | May | 62.66 | 0.53 | 51.00 | 3.000 | 1% | 87% | -8.13 |
| | Jun | 64.28 | 0.36 | 51.00 | 3.000 | 1% | 85% | -9.92 |
| | Jul | 62.18 | 0.26 | 51.00 | 3.000 | 0% | 87% | -7.92 |
| | Aug | 61.06 | 0.37 | 51.00 | 3.000 | 1% | 89% | -6.69 |
| | Sep | 61.33 | 0.17 | 51.00 | 3.000 | 0% | 88% | -7.17 |
| | Oct | 59.54 | 0.65 | 51.00 | 3.000 | 1% | 92% | -4.89 |
| | Nov | 53.09 | 1.17 | 51.00 | 3.000 | 2% | 104% | 2.09 |
| | Dec | 50.11 | 1.54 | 51.00 | 3.000 | 3% | 111% | 5.43 |
| 2024 | Jan | 51.91 | 1.16 | 51.00 | 5.000 | 2% | 110% | 5.25 |
| | Feb | 52.30 | 0.89 | 51.00 | 5.000 | 2% | 109% | 4.59 |
| | Mar | 58.61 | 0.91 | 51.00 | 5.000 | 2% | 97% | -1.70 |
| | Apr | 59.47 | 1.43 | 51.00 | 5.000 | 2% | 97% | -2.05 |
| | May | 64.62 | 0.53 | 51.00 | 5.000 | 1% | 87% | -8.10 |
| | Jun | 66.30 | 0.36 | 51.00 | 5.000 | 1% | 85% | -9.94 |
| | Jul | 64.13 | 0.26 | 51.00 | 5.000 | 0% | 88% | -7.87 |
| | Aug | 62.97 | 0.37 | 51.00 | 5.000 | 1% | 90% | -6.60 |
| | Sep | 63.26 | 0.17 | 51.00 | 5.000 | 0% | 89% | -7.09 |
| | Oct | 61.41 | 0.65 | 51.00 | 5.000 | 1% | 92% | -4.76 |
| | Nov | 54.75 | 1.17 | 51.00 | 5.000 | 2% | 104% | 2.42 |
| | Dec | 51.68 | 1.54 | 51.00 | 5.000 | 3% | 111% | 5.86 |
| 2025 | Jan | 53.42 | 1.16 | 51.00 | 6.000 | 2% | 109% | 4.74 |
| | Feb | 53.82 | 0.89 | 51.00 | 6.000 | 2% | 108% | 4.07 |
| | Mar | 60.31 | 0.91 | 51.00 | 6.000 | 2% | 96% | -2.40 |
| | Apr | 61.20 | 1.43 | 51.00 | 6.000 | 2% | 95% | -2.77 |
| | May | 66.50 | 0.53 | 51.00 | 6.000 | 1% | 87% | -8.97 |
| | Jun | 68.22 | 0.36 | 51.00 | 6.000 | 1% | 84% | -10.86 |
| | Jul | 65.99 | 0.26 | 51.00 | 6.000 | 0% | 87% | -8.73 |
| | Aug | 64.80 | 0.37 | 51.00 | 6.000 | 1% | 89% | -7.43 |
| | Sep | 65.09 | 0.17 | 51.00 | 6.000 | 0% | 88% | -7.92 |
| | Oct | 63.19 | 0.65 | 51.00 | 6.000 | 1% | 91% | -5.54 |
| | Nov | 56.34 | 1.17 | 51.00 | 6.000 | 2% | 103% | 1.84 |

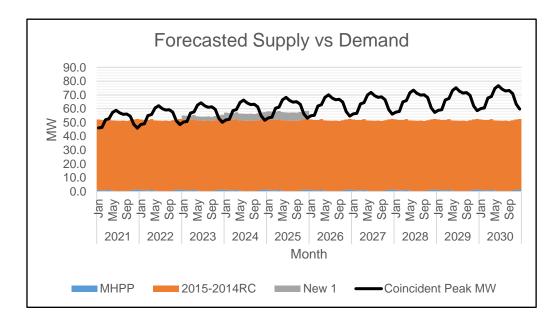
| | Dec | 53.18 | 1.54 | 51.00 | 6.000 | 3% | 110% | 5.36 |
|------|-----|-------|------|-------|-------|----|------|--------|
| 2026 | Jan | 54.86 | 1.16 | 51.00 | 0.000 | 2% | 95% | -2.70 |
| | Feb | 55.27 | 0.89 | 51.00 | 0.000 | 2% | 94% | -3.38 |
| | Mar | 61.94 | 0.91 | 51.00 | 0.000 | 1% | 84% | -10.02 |
| | Apr | 62.85 | 1.43 | 51.00 | 0.000 | 2% | 83% | -10.42 |
| | May | 68.29 | 0.53 | 51.00 | 0.000 | 1% | 75% | -16.76 |
| | Jun | 70.06 | 0.36 | 51.00 | 0.000 | 1% | 73% | -18.70 |
| | Jul | 67.77 | 0.26 | 51.00 | 0.000 | 0% | 76% | -16.51 |
| | Aug | 66.55 | 0.37 | 51.00 | 0.000 | 1% | 77% | -15.17 |
| | Sep | 66.85 | 0.17 | 51.00 | 0.000 | 0% | 77% | -15.68 |
| | Oct | 64.90 | 0.65 | 51.00 | 0.000 | 1% | 80% | -13.24 |
| | Nov | 57.86 | 1.17 | 51.00 | 0.000 | 2% | 90% | -5.68 |
| | Dec | 54.62 | 1.54 | 51.00 | 0.000 | 3% | 96% | -2.08 |
| 2027 | Jan | 56.24 | 1.16 | 51.00 | 0.000 | 2% | 93% | -4.08 |
| | Feb | 56.66 | 0.89 | 51.00 | 0.000 | 2% | 92% | -4.77 |
| | Mar | 63.50 | 0.91 | 51.00 | 0.000 | 1% | 82% | -11.58 |
| | Apr | 64.43 | 1.43 | 51.00 | 0.000 | 2% | 81% | -12.01 |
| | May | 70.01 | 0.53 | 51.00 | 0.000 | 1% | 74% | -18.48 |
| | Jun | 71.82 | 0.36 | 51.00 | 0.000 | 1% | 72% | -20.46 |
| | Jul | 69.48 | 0.26 | 51.00 | 0.000 | 0% | 74% | -18.22 |
| | Aug | 68.22 | 0.37 | 51.00 | 0.000 | 1% | 75% | -16.85 |
| | Sep | 68.53 | 0.17 | 51.00 | 0.000 | 0% | 75% | -17.36 |
| | Oct | 66.53 | 0.65 | 51.00 | 0.000 | 1% | 78% | -14.88 |
| | Nov | 59.31 | 1.17 | 51.00 | 0.000 | 2% | 88% | -7.14 |
| | Dec | 55.99 | 1.54 | 51.00 | 0.000 | 3% | 94% | -3.45 |
| 2028 | Jan | 57.57 | 1.16 | 51.00 | 0.000 | 2% | 91% | -5.41 |
| | Feb | 58.00 | 0.89 | 51.00 | 0.000 | 2% | 89% | -6.11 |
| | Mar | 64.99 | 0.91 | 51.00 | 0.000 | 1% | 80% | -13.08 |
| | Apr | 65.95 | 1.43 | 51.00 | 0.000 | 2% | 79% | -13.53 |
| | May | 71.66 | 0.53 | 51.00 | 0.000 | 1% | 72% | -20.14 |
| | Jun | 73.52 | 0.36 | 51.00 | 0.000 | 0% | 70% | -22.16 |
| | Jul | 71.12 | 0.26 | 51.00 | 0.000 | 0% | 72% | -19.86 |

| | Aug | 69.83 | 0.37 | 51.00 | 0.000 | 1% | 74% | -18.46 |
|------|-----|-------|------|-------|-------|----|-----|--------|
| | Sep | 70.15 | 0.17 | 51.00 | 0.000 | 0% | 73% | -18.98 |
| | Oct | 68.10 | 0.65 | 51.00 | 0.000 | 1% | 76% | -16.45 |
| | Nov | 60.71 | 1.17 | 51.00 | 0.000 | 2% | 86% | -8.54 |
| | Dec | 57.32 | 1.54 | 51.00 | 0.000 | 3% | 92% | -4.77 |
| 2029 | Jan | 58.85 | 1.16 | 51.00 | 0.000 | 2% | 89% | -6.68 |
| | Feb | 59.28 | 0.89 | 51.00 | 0.000 | 1% | 88% | -7.40 |
| | Mar | 66.44 | 0.91 | 51.00 | 0.000 | 1% | 78% | -14.52 |
| | Apr | 67.42 | 1.43 | 51.00 | 0.000 | 2% | 78% | -14.99 |
| | May | 73.25 | 0.53 | 51.00 | 0.000 | 1% | 70% | -21.73 |
| | Jun | 75.15 | 0.36 | 51.00 | 0.000 | 0% | 68% | -23.79 |
| | Jul | 72.70 | 0.26 | 51.00 | 0.000 | 0% | 71% | -21.43 |
| | Aug | 71.38 | 0.37 | 51.00 | 0.000 | 1% | 72% | -20.01 |
| | Sep | 71.70 | 0.17 | 51.00 | 0.000 | 0% | 71% | -20.54 |
| | Oct | 69.61 | 0.65 | 51.00 | 0.000 | 1% | 74% | -17.96 |
| | Nov | 62.06 | 1.17 | 51.00 | 0.000 | 2% | 84% | -9.89 |
| | Dec | 58.59 | 1.54 | 51.00 | 0.000 | 3% | 90% | -6.04 |
| 2030 | Jan | 60.08 | 1.16 | 51.00 | 0.000 | 2% | 87% | -7.92 |
| | Feb | 60.53 | 0.89 | 51.00 | 0.000 | 1% | 86% | -8.64 |
| | Mar | 67.83 | 0.91 | 51.00 | 0.000 | 1% | 77% | -15.91 |
| | Apr | 68.83 | 1.43 | 51.00 | 0.000 | 2% | 76% | -16.40 |
| | May | 74.79 | 0.53 | 51.00 | 0.000 | 1% | 69% | -23.26 |
| | Jun | 76.72 | 0.36 | 51.00 | 0.000 | 0% | 67% | -25.36 |
| | Jul | 74.22 | 0.26 | 51.00 | 0.000 | 0% | 69% | -22.96 |
| | Aug | 72.88 | 0.37 | 51.00 | 0.000 | 1% | 70% | -21.50 |
| | Sep | 73.21 | 0.17 | 51.00 | 0.000 | 0% | 70% | -22.04 |
| | Oct | 71.07 | 0.65 | 51.00 | 0.000 | 1% | 73% | -19.42 |
| | Nov | 63.36 | 1.17 | 51.00 | 0.000 | 2% | 82% | -11.19 |
| | Dec | 59.81 | 1.54 | 51.00 | 0.000 | 3% | 88% | -7.27 |

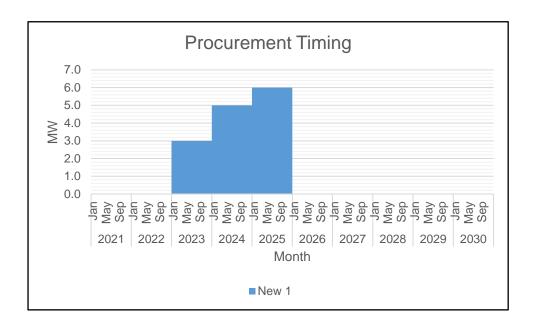
The Peak Demand was forecasted using the energy, and from there, demand is obtained by utilizing the latest load factor and was assumed to occur on the month of June where the load are expected to be highest because high temperature is usually attained during this month. Monthly Peak Demand is at its lowest on the month of January due to low temperature. In general, Peak Demand is expected to grow at a rate of 4% to 5% annually.



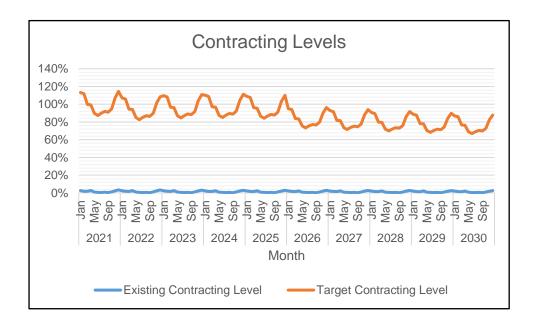
The available supply is generally below the Peak Demand. This is because the contracted capacity is lower than the peak, of which was obtained from the coop's economic consideration using the so-called "optimal power supply optimal mix".



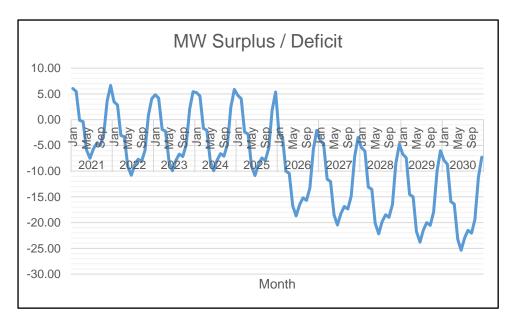
Of the available supply, the maximum is 51 MW from Generation Company. This is followed by 1.5 MW from MHPP. The shortage in the contracted capacity will be sourced from WESM.



The first wave of supply procurement will be for 3 MW planned to be available by the month of January 2023 intended for power procurement through Aggregation of R1+CAR+S1 ECs. This will be followed by 5MW and 6 MW by 2024 and 2025, respectively.



Currently, there is contracting level by 70% to 100% under Case No. 2015-204 RC. The highest target contracting level is 114% which is expected to occur on 2021. The lowest target contracting level is 67% which is expected to occur on 2030.



Currently, there is contracting capacity by 51 MW. The highest deficit is 25.36 MW which is expected to occur on the month of June. The lowest deficit is 0.13 MW which is expected to occur on the month of March.

No over or under-contracting with respect to coincident peak demand. Optimal Generation/supply mix was obtained from the power plant screening curve based on the cost characteristics of baseload and peaking plants represented by coal-fired, combined cycle and diesel. The study on the demand suggests that the least-cost for the baseload demand will be supplied by a thermal (coal as fuel) plant. The peaking demand will be supplied by a Diesel plant or to be sourced from WESM, whichever is cheaper.

The levelized annual cost of these three technologies for any given capacity factor were simulated and plotted against 8760 hour load duration curve. Relating the screening curve with the Load Duration Curve, this results in a least-cost mix of 78% baseload demand with 97% annual energy and 22% peaking demand with only 3% annual energy equivalent.

| | | MWh Offtake | MWh Output | MWh System Loss | Transm'n Loss | System Loss |
|------|-----|-------------|------------|-----------------------|------------------|----------------|
| 2021 | Jan | 27,408 | 25,155 | 2,254 | 0.00% | 8.22% |
| | Feb | 24,052 | 22,278 | 1,775 | 0.00% | 7.38% |
| | Mar | 23,863 | 22,097 | 1,766 | 0.00% | 7.40% |
| | Apr | 33,648 | 28,881 | 4,768 | 0.00% | 14.17% |
| | May | 34,067 | 30,974 | 3,093 | 0.00% | 9.08% |
| | Jun | 40,483 | 32,692 | 8,181 | -0.96% | 20.02% |
| | Jul | 33,370 | 29,919 | 3,451 | 0.00% | 10.34% |
| | Aug | 32,045 | 28,013 | 4,032 | 0.00% | 12.58% |
| | Sep | 31,984 | 26,282 | 5,702 | 0.00% | 17.83% |
| | Oct | 28,754 | 25,549 | 3,205 | 0.00% | 11.15% |
| | Nov | 29,126 | 26,394 | 2,732 | 0.00% | 9.38% |

| | Dec | 24,619 | 22,653 | 1,967 | 0.00% | 7.99% |
|------|-----|--------|--------|-------|--------|--------|
| 2022 | Jan | 28,618 | 26,034 | 2,585 | 0.00% | 9.03% |
| | Feb | 25,075 | 23,039 | 2,036 | 0.00% | 8.12% |
| | Mar | 24,884 | 22,858 | 2,026 | 0.00% | 8.14% |
| | Apr | 35,364 | 29,896 | 5,468 | 0.00% | 15.46% |
| | May | 35,620 | 32,072 | 3,547 | 0.00% | 9.96% |
| | Jun | 40,368 | 33,854 | 9,383 | -7.11% | 21.70% |
| | Jul | 34,954 | 30,996 | 3,958 | 0.00% | 11.32% |
| | Aug | 33,637 | 29,013 | 4,624 | 0.00% | 13.75% |
| | Sep | 33,752 | 27,212 | 6,540 | 0.00% | 19.38% |
| | Oct | 30,127 | 26,451 | 3,676 | 0.00% | 12.20% |
| | Nov | 30,454 | 27,321 | 3,133 | 0.00% | 10.29% |
| | Dec | 25,626 | 23,371 | 2,256 | 0.00% | 8.80% |
| 2023 | Jan | 29,657 | 27,075 | 2,582 | 0.00% | 8.71% |
| | Feb | 25,996 | 23,963 | 2,033 | 0.00% | 7.82% |
| | Mar | 25,797 | 23,773 | 2,023 | 0.00% | 7.84% |
| | Apr | 36,553 | 31,091 | 5,462 | 0.00% | 14.94% |
| | May | 36,897 | 33,354 | 3,543 | 0.00% | 9.60% |
| | Jun | 42,625 | 35,207 | 9,372 | -4.58% | 21.02% |
| | Jul | 36,186 | 32,233 | 3,953 | 0.00% | 10.92% |
| | Aug | 34,790 | 30,171 | 4,619 | 0.00% | 13.28% |
| | Sep | 34,832 | 28,299 | 6,533 | 0.00% | 18.75% |
| | Oct | 31,180 | 27,508 | 3,672 | 0.00% | 11.78% |
| | Nov | 31,543 | 28,413 | 3,130 | 0.00% | 9.92% |
| | Dec | 26,567 | 24,314 | 2,253 | 0.00% | 8.48% |
| 2024 | Jan | 30,774 | 28,432 | 2,342 | 0.00% | 7.61% |
| | Feb | 27,008 | 25,164 | 1,844 | 0.00% | 6.83% |
| | Mar | 26,799 | 24,964 | 1,835 | 0.00% | 6.85% |
| | Apr | 37,602 | 32,649 | 4,954 | 0.00% | 13.17% |
| | May | 38,238 | 35,025 | 3,214 | 0.00% | 8.40% |
| | Jun | 44,175 | 36,970 | 8,500 | -2.93% | 18.69% |
| | Jul | 37,433 | 33,847 | 3,586 | 0.00% | 9.58% |
| | Aug | 35,872 | 31,682 | 4,189 | 0.00% | 11.68% |
| | Sep | 35,642 | 29,717 | 5,925 | 0.00% | 16.62% |
| | Oct | 32,216 | 28,886 | 3,330 | 0.00% | 10.34% |
| | Nov | 32,675 | 29,837 | 2,839 | 0.00% | 8.69% |
| | Dec | 27,576 | 25,532 | 2,043 | 0.00% | 7.41% |
| 2025 | Jan | 31,626 | 29,231 | 2,395 | 0.00% | 7.57% |
| | Feb | 27,753 | 25,867 | 1,886 | 0.00% | 6.80% |
| | Mar | 27,540 | 25,663 | 1,877 | 0.00% | 6.82% |
| | Apr | 38,634 | 33,567 | 5,067 | 0.00% | 13.11% |
| | May | 39,299 | 36,012 | 3,287 | 0.00% | 8.36% |
| | Jun | 44,915 | 38,013 | 8,694 | -3.99% | 18.61% |
| | Jul | 38,472 | 34,805 | 3,667 | 0.00% | 9.53% |
| | Aug | 36,862 | 32,577 | 4,285 | 0.00% | 11.62% |
| | Sep | 36,614 | 30,554 | 6,060 | 0.00% | 16.55% |
| | Oct | 33,106 | 29,700 | 3,406 | 0.00% | 10.29% |

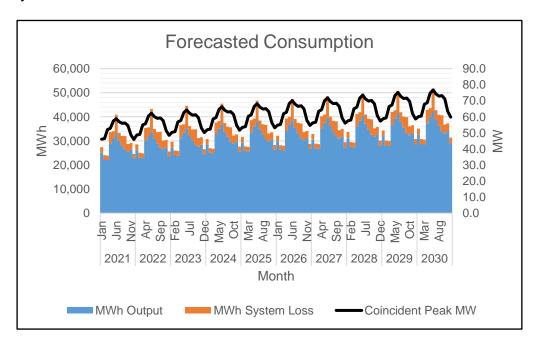
| | Nov | 33,579 | 30,676 | 2,903 | 0.00% | 8.65% |
|------|-----|--------|------------------|----------------|---------|--------|
| | Dec | 28,323 | 26,233 | 2,090 | 0.00% | 7.38% |
| 2026 | Jan | 32,140 | 29,710 | 2,429 | 0.00% | 7.56% |
| | Feb | 28,203 | 26,290 | 1,913 | 0.00% | 6.78% |
| | Mar | 27,987 | 26,083 | 1,904 | 0.00% | 6.80% |
| | Apr | 39,258 | 34,118 | 5,139 | 0.00% | 13.09% |
| | May | 39,429 | 36,604 | 3,334 | -1.29% | 8.35% |
| | Jun | 40,644 | 38,638 | 8,819 | -16.76% | 18.58% |
| | Jul | 38,998 | 35,378 | 3,720 | -0.26% | 9.51% |
| | Aug | 37,459 | 33,113 | 4,346 | 0.00% | 11.60% |
| | Sep | 37,203 | 31,056 | 6,147 | 0.00% | 16.52% |
| | Oct | 33,643 | 30,188 | 3,455 | 0.00% | 10.27% |
| | Nov | 34,124 | 31,179 | 2,945 | 0.00% | 8.63% |
| | Dec | 28,778 | 26,658 | 2,120 | 0.00% | 7.37% |
| 2027 | Jan | 32,922 | 30,440 | 2,481 | 0.00% | 7.54% |
| | Feb | 28,887 | 26,933 | 1,954 | 0.00% | 6.76% |
| | Mar | 28,666 | 26,722 | 1,944 | 0.00% | 6.78% |
| | Apr | 40,207 | 34,958 | 5,249 | 0.00% | 13.06% |
| | May | 39,453 | 37,507 | 3,406 | -3.70% | 8.32% |
| | Jun | 40,669 | 39,592 | 9,007 | -19.50% | 18.53% |
| | Jul | 39,019 | 36,254 | 3,800 | -2.65% | 9.49% |
| | Aug | 38,370 | 33,931 | 4,439 | 0.00% | 11.57% |
| | Sep | 38,100 | 31,821 | 6,279 | 0.00% | 16.48% |
| | Oct | 34,460 | 30,931 | 3,529 | 0.00% | 10.24% |
| | Nov | 34,954 | 31,946 | 3,008 | 0.00% | 8.61% |
| | Dec | 29,464 | 27,299 | 2,165 | 0.00% | 7.35% |
| 2028 | Jan | 33,673 | 31,140 | 2,533 | 0.00% | 7.52% |
| | Feb | 29,545 | 27,550 | 1,995 | 0.00% | 6.75% |
| | Mar | 29,319 | 27,334 | 1,985 | 0.00% | 6.77% |
| | Apr | 40,537 | 35,762 | 5,359 | -1.44% | 13.03% |
| | May | 39,477 | 38,372 | 3,477 | -6.01% | 8.31% |
| | Jun | 40,694 | 40,505 | 9,196 | -22.13% | 18.50% |
| | Jul | 39,040 | 37,092 | 3,879 | -4.94% | 9.47% |
| | Aug | 39,246 | 34,714 | 4,532 | 0.00% | 11.55% |
| | Sep | 38,964 | 32,555 | 6,410 | 0.00% | 16.45% |
| | Oct | 35,246 | 31,644 | 3,603 | 0.00% | 10.22% |
| | Nov | 35,752 | 32,681 | 3,071 | 0.00% | 8.59% |
| 0000 | Dec | 30,125 | 27,915 | 2,210 | 0.00% | 7.34% |
| 2029 | Jan | 34,398 | 31,815 | 2,583 | 0.00% | 7.51% |
| | Feb | 30,178 | 28,144 | 2,034 | 0.00% | 6.74% |
| | Mar | 29,949 | 27,925 | 2,024 | 0.00% | 6.76% |
| | Apr | 40,560 | 36,538 | 5,464 | -3.56% | 13.01% |
| | May | 39,501 | 39,206 | 3,545 | -8.23% | 8.29% |
| | Jun | 40,719 | 41,386 | 9,375 | -24.66% | 18.47% |
| | Jul | 39,062 | 37,901 35,470 | 3,955 | -7.15% | 9.45% |
| | Aug | 40,090 | 35,470 | 4,621 6,535 | 0.00% | 11.53% |
| | Sep | 39,797 | 33,262 | 6,535 | 0.00% | 16.42% |

| | Oct | 36,004 | 32,331 | 3,673 | 0.00% | 10.20% |
|------|-----|--------|--------|-------|---------|--------|
| | Nov | 36,521 | 33,390 | 3,131 | 0.00% | 8.57% |
| | Dec | 30,762 | 28,509 | 2,254 | 0.00% | 7.33% |
| 2030 | Jan | 35,098 | 32,468 | 2,630 | 0.00% | 7.49% |
| | Feb | 30,791 | 28,719 | 2,071 | 0.00% | 6.73% |
| | Mar | 30,557 | 28,496 | 2,061 | 0.00% | 6.75% |
| | Apr | 40,584 | 37,288 | 5,564 | -5.59% | 12.98% |
| | May | 39,525 | 40,012 | 3,610 | -10.36% | 8.28% |
| | Jun | 40,745 | 42,237 | 9,548 | -27.10% | 18.44% |
| | Jul | 39,084 | 38,682 | 4,028 | -9.28% | 9.43% |
| | Aug | 40,253 | 36,200 | 4,706 | -1.62% | 11.50% |
| | Sep | 40,303 | 33,946 | 6,655 | -0.74% | 16.39% |
| | Oct | 36,736 | 32,995 | 3,741 | 0.00% | 10.18% |
| | Nov | 37,264 | 34,076 | 3,189 | 0.00% | 8.56% |
| | Dec | 31,214 | 29,083 | 2,295 | -0.53% | 7.31% |

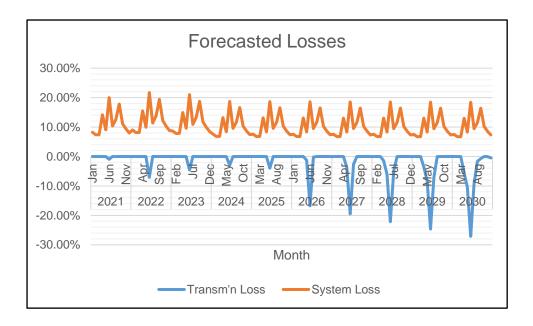
MWh Offtake was forecasted using seven years of historical data using Trend Analysis with the mean percentage error (MAPE) of 0.63% and adjusted R² of 99.43%. The assumed load factor is 65%.

On the energy demand forecast, there is a slightly increase in energy demand due to the effect of pandemic. However, the usage of air-conditioning units in most households now is new trend and is a consideration in the forecast.

System loss is decreasing, assuming that the planned projects is implemented during each year.



MWh Output was expected to grow at a rate of 3.34% annually.



Transmission Loss is expected to range from 1% to 9% while System Loss is expected to range from 6% to 10.25%.

Power Supply

| Case No. | Туре | GenCo | Minimum MW | Minimum MWh/yr | PSA Start | PSA End |
|----------|------|----------|---------------|-------------------|-----------|------------|
| MHPP | Base | DU-owned | 0.17 | 4,430 | 1/1/1984 | 12/31/2034 |

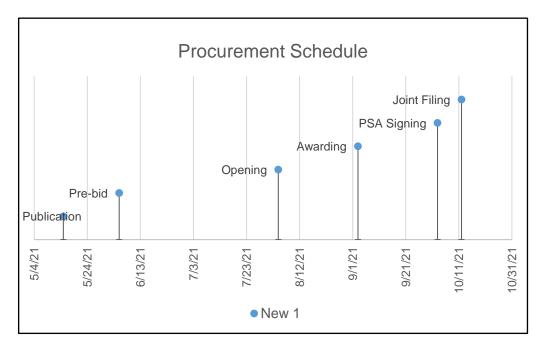
Mini-hydro power plant is DU-owned generator. The output is very minimal compared to the demand of the DU.

| Case No. | Туре | GenCo | Minimum MW | Minimum MWh/yr | PSA Start | PSA End |
|-------------|------|---------------------------------------|---------------|-------------------|------------|------------|
| 2015-204 RC | Base | Masinloc Power Partners Company, Ltd. | 35.70 | 312,732 | 12/26/2018 | 12/25/2038 |

The existing (2019-2038) power supply contracts have been acquired through competitive power supply procurement in 2015. The CSP (competitive selection process) had taken place with the of the R1+CAR electric cooperatives aggregation group. The Joint Technical Working Group was conducted the formulation of power plant screening curve with the historical load duration curve and this is the basis in deciding what's the least cost power supply technology for the requirement. The study on the aggregated demand suggests that the least-cost for the baseload demand will be supplied by a thermal (coal as fuel) plant. The peaking demand will be supplied by a Diesel plant or to be sourced from WESM, whichever is cheaper.

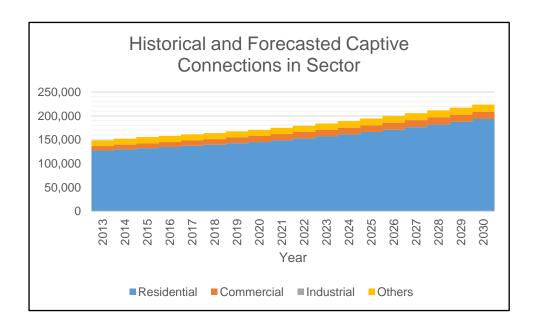
The actual billed overall monthly charge under the PSA ranged from 4.3272 P/kWh to 5.4378 P/KWh in 2020.

| | New 1 |
|----------------|------------|
| Туре | Base |
| Minimum MW | 3.00 |
| Minimum MWh/yr | 26,280 |
| PSA Start | 12/26/2022 |
| PSA End | 12/25/2025 |
| Publication | 5/15/2021 |
| Pre-bid | 6/5/2021 |
| Opening | 8/4/2021 |
| Awarding | 9/3/2021 |
| PSA Signing | 10/3/2021 |
| Joint Filing | 10/12/2021 |



For the procurement of 3 MW of supply which is planned to be available on December 26, 2022, the first publication or launch of CSP will be on May 15, 2021. Joint filing is planned on October 12, 2021, or 150 days later, in accordance with DOE's 2018 CSP Policy.

Captive Customer Connections



The number of residential connections is expected to grow at a rate of 3% annually. Said customer class is expected to account for 65% of the total energy consumption.