



DATOS RELEVANTES DEL MERCADO ELÉCTRICO PANAMEÑO

ABRIL 2020

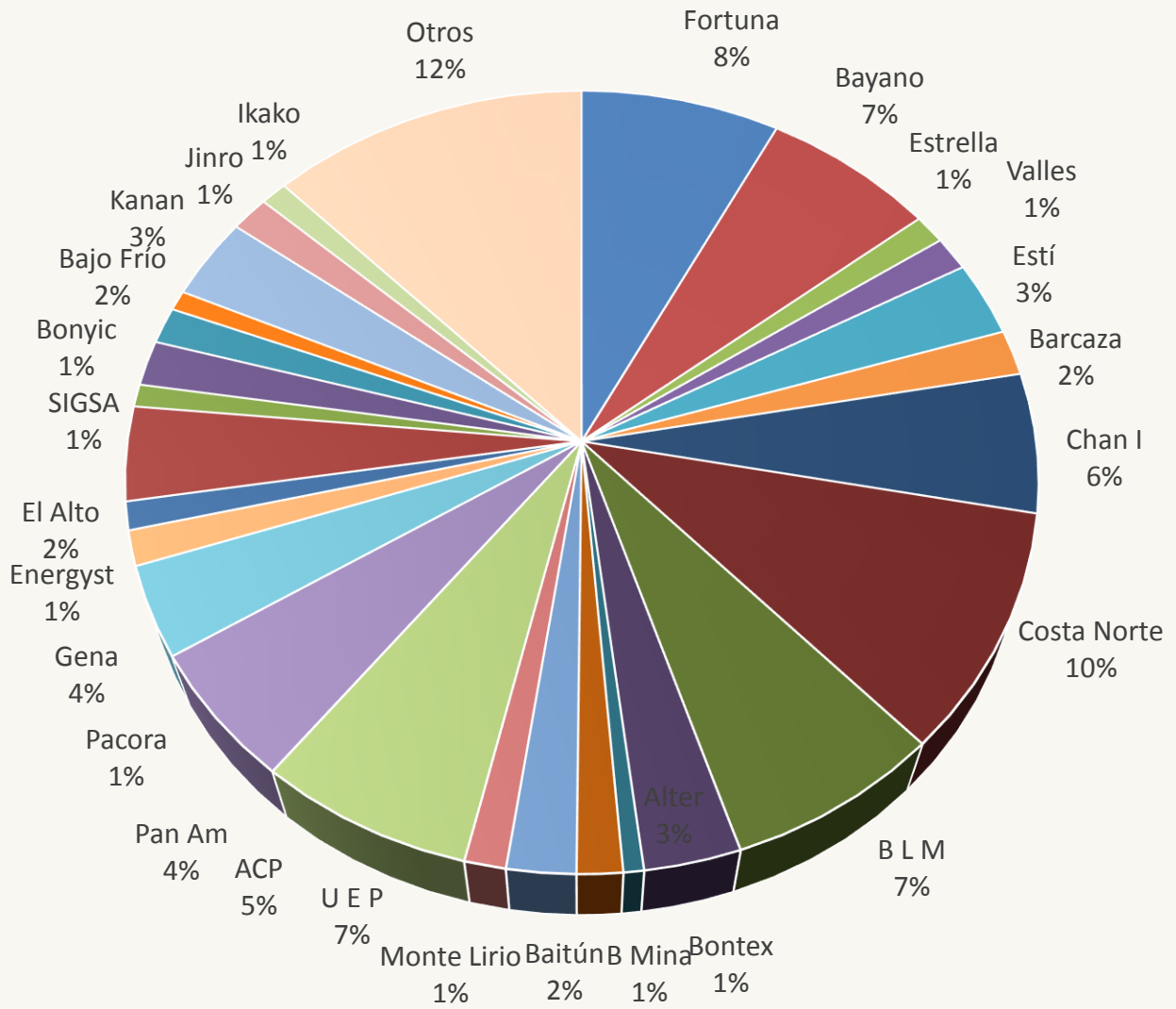
CONTENIDO

| | | |
|-------|---|----|
| I. | CAPACIDAD INSTALADA Y CAPACIDAD FIRME POR AGENTE Y POR PLANTA | 3 |
| II. | CAPACIDAD INSTALADA Y CAPACIDAD FIRME Y DEMANDA MÁXIMA MENSUAL | 6 |
| III. | GENERACIÓN POR EMPRESA Y POR PLANTA | 7 |
| IV. | CAPACIDAD INSTALADA POR TIPO DE TECNOLOGÍA | 11 |
| V. | IMPORTACIONES Y EXPORTACIONES | 12 |
| VI. | COSTO MARGINAL DEL SISTEMA | 13 |
| VII. | DEMANDA MÁXIMA MENSUAL Y ANUAL | 14 |
| VIII. | COSTO DE ENERGÍA Y POTENCIA HIDRO, TÉRMICA, EÓLICA Y FOTOVOLTAICA | 15 |
| IX. | CLIENTES, VENTAS E INGRESOS POR DISTRIBUIDORA | 16 |
| X. | EFFECTOS DE LA CUARENTENA EN EL SECTOR ELÉCTRICO PANAMEÑO | 18 |

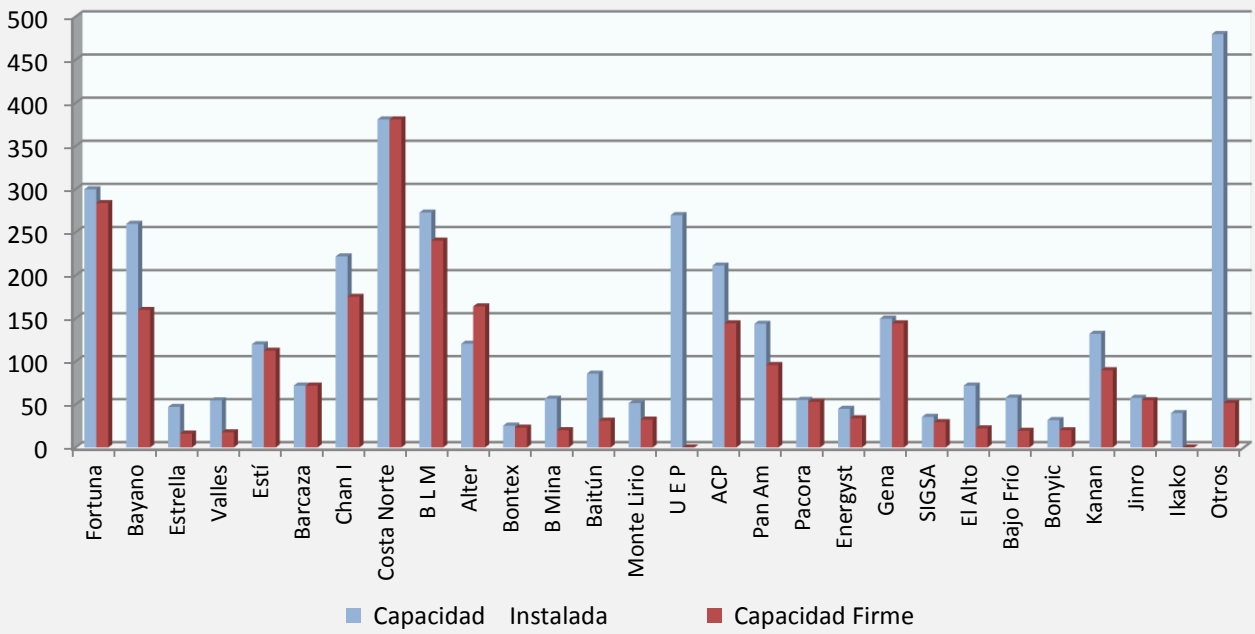
I. CAPACIDAD INSTALADA Y CAPACIDAD FIRME POR AGENTE Y POR PLANTA

| EMPRESA | PLANTA | Capacidad Instalada MW | Capacidad Firme MW | % |
|--------------|-------------|------------------------------|--------------------------|---------------|
| ENEL | Fortuna | 300.00 | 284.00 | 7.78 |
| AES Pmá | Bayano | 260.00 | 160.12 | 6.75 |
| AES Pmá | Estrella | 47.20 | 16.13 | 1.22 |
| AES Pmá | Valles | 54.76 | 17.63 | 1.42 |
| AES Pmá | Estí | 120.00 | 112.67 | 3.11 |
| AES Pmá | Barcaza | 72.00 | 72.00 | 1.87 |
| AES Chan | Chan I | 222.17 | 175.33 | 5.76 |
| AES Colón | Costa Norte | 381.00 | 381.00 | 9.89 |
| CELSIA | B L M | 273.00 | 240.50 | 7.08 |
| CELSIA | Alter | 120.77 | 164.21 | 3.13 |
| CELSIA | Bontex | 25.34 | 23.04 | 0.66 |
| IDEAL | B Mina | 56.80 | 20.07 | 1.47 |
| IDEAL | Baitún | 85.90 | 31.09 | 2.23 |
| EISA | Monte Lirio | 51.60 | 32.38 | 1.34 |
| U E P | U E P | 270.00 | 0.00 | 7.01 |
| ACP | ACP | 211.54 | 144.50 | 5.49 |
| PAN AM | Pan Am | 144.00 | 96.00 | 3.74 |
| PEDR POWER | Pacora | 55.35 | 53.00 | 1.44 |
| EGESA | Energyst | 44.98 | 34.00 | 1.17 |
| GENA | Gena | 150.00 | 144.50 | 3.89 |
| SIGSA | SIGSA | 35.60 | 29.50 | 0.92 |
| H CAISÁN | El Alto | 72.00 | 22.14 | 1.87 |
| FOUNTAIN | Bajo Frío | 58.00 | 19.42 | 1.50 |
| H ECO TERIBE | Bonyic | 31.80 | 20.00 | 0.83 |
| KANAN | Kanan | 132.30 | 90.00 | 3.43 |
| JINRO | Jinro | 57.80 | 55.00 | 1.50 |
| TECNISOL | Ikako | 40.00 | 0.00 | 1.04 |
| OTROS | Otros | 479.94 | 51.78 | 12.45 |
| TOTAL | | 3,853.85 | 2,490.01 | 100.00 |

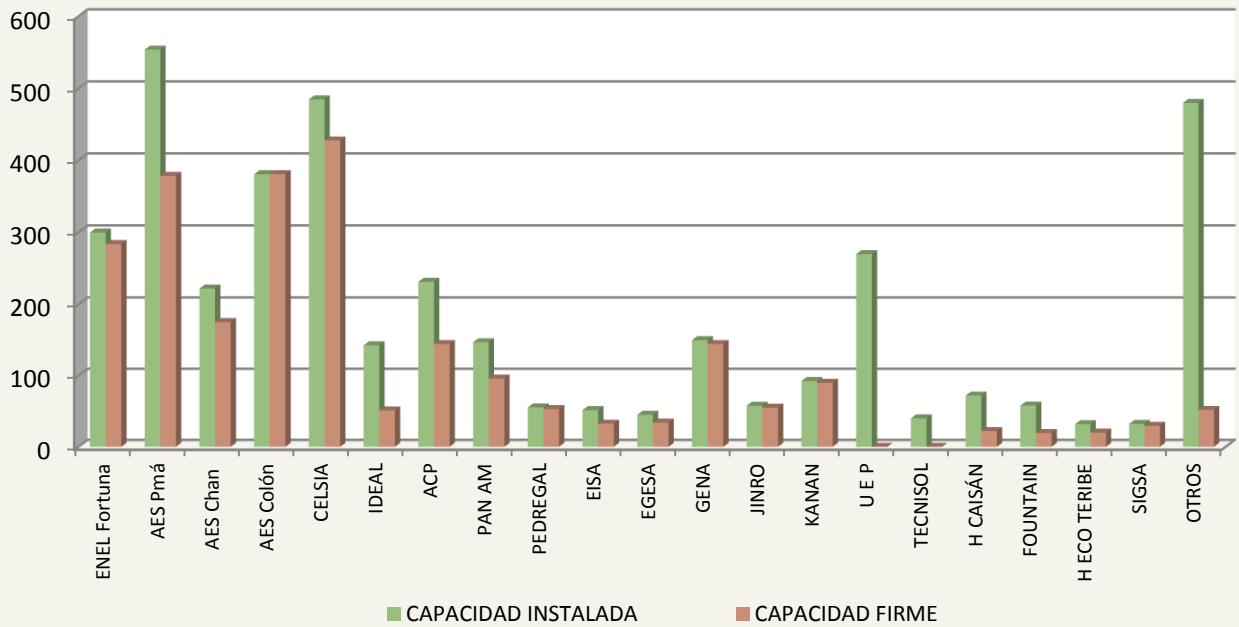
CAPACIDAD INSTALADA POR PLANTA 2020



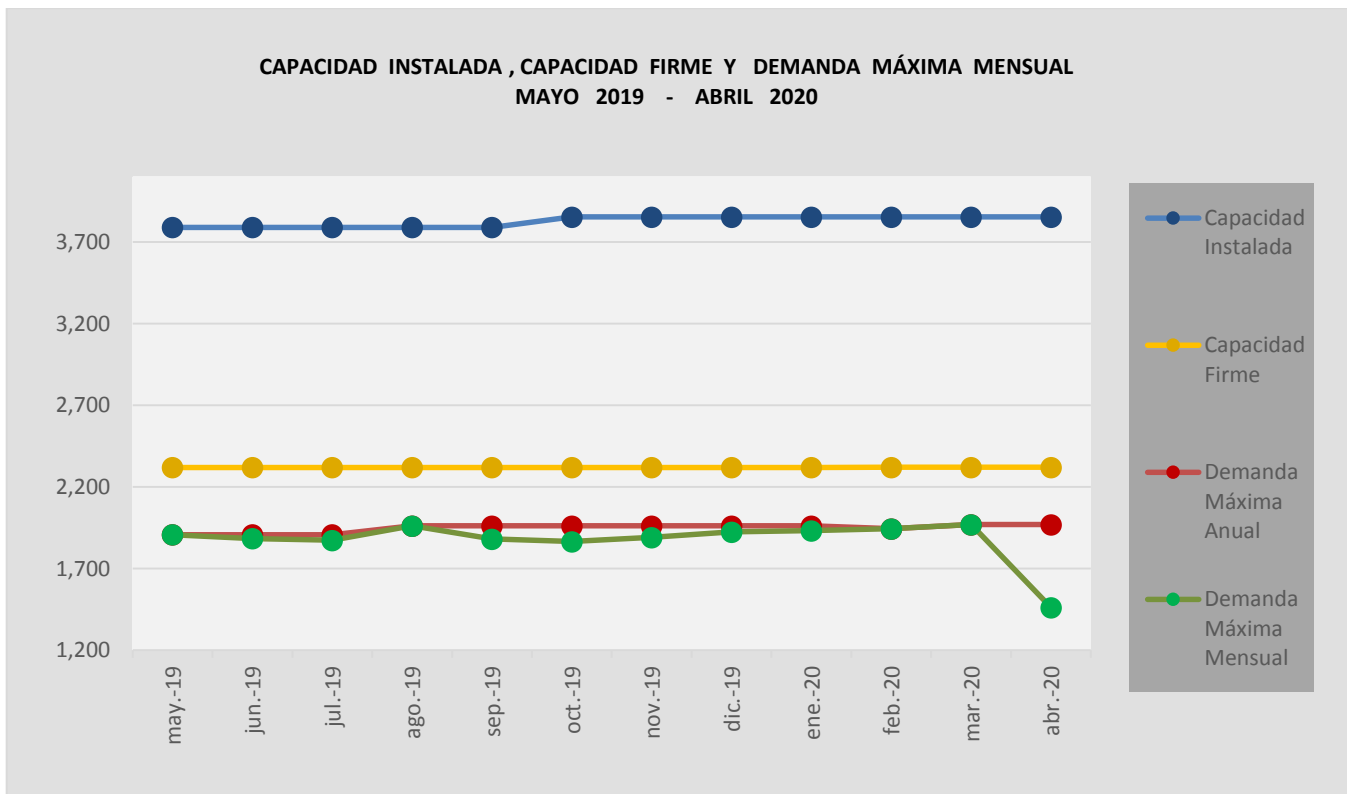
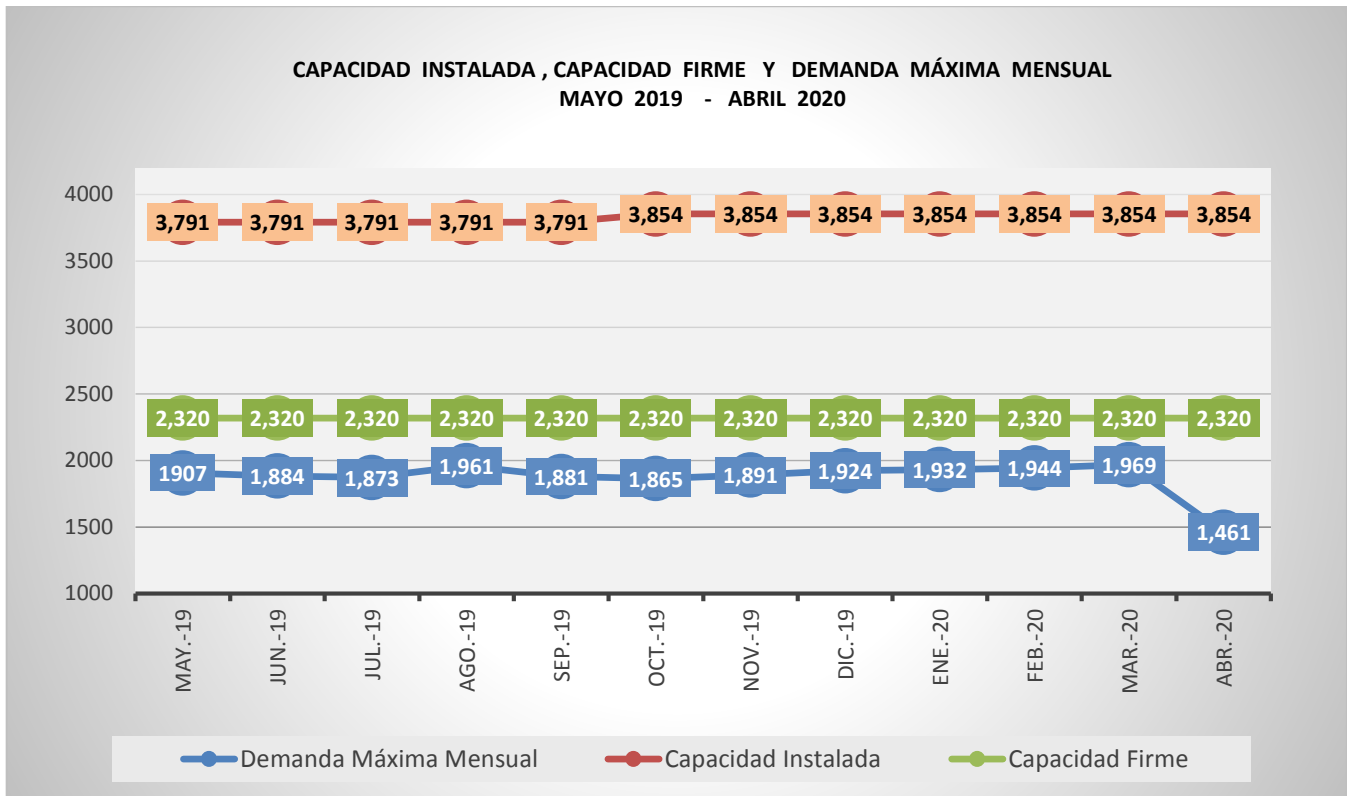
**CAPACIDAD INSTALADA Y CAPACIDAD FIRME POR PLANTA (MW)
2020**



**CAPACIDAD INSTALADA Y CAPACIDAD FIRME POR EMPRESA (MW)
2020**

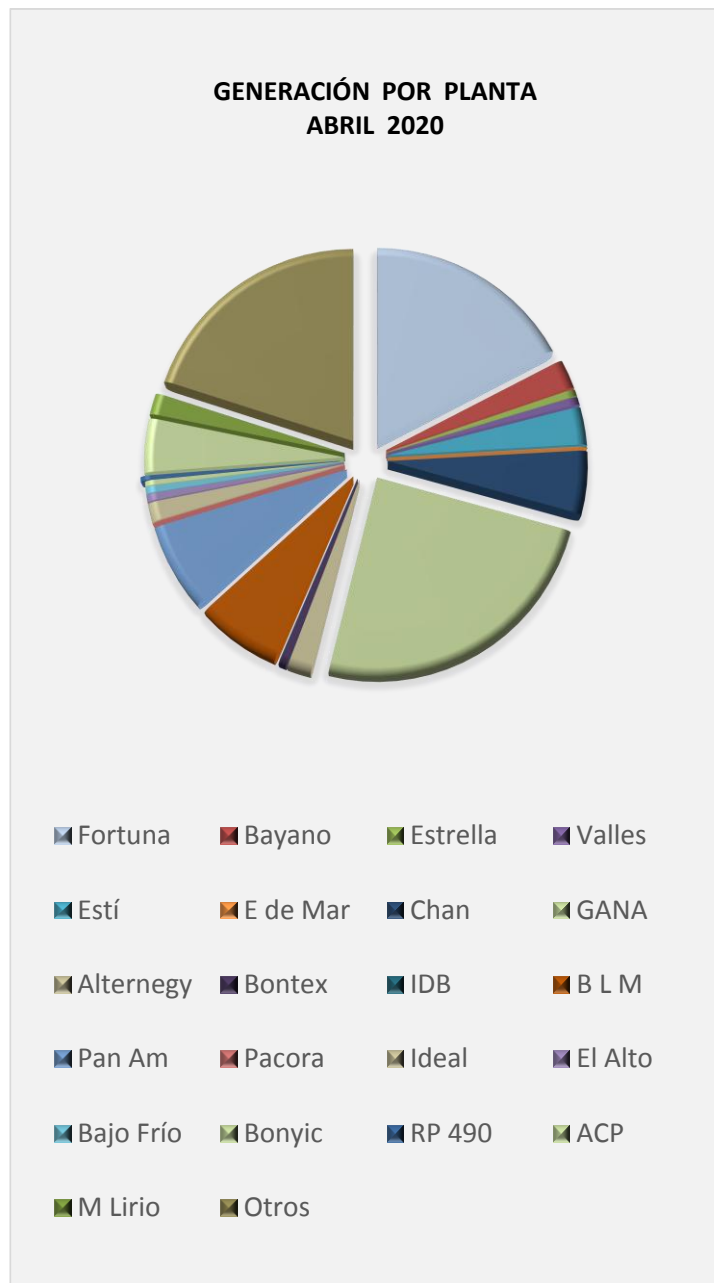


II. CAPACIDAD INSTALADA Y FIRME VS DEMANDA MÁXIMA MENSUAL

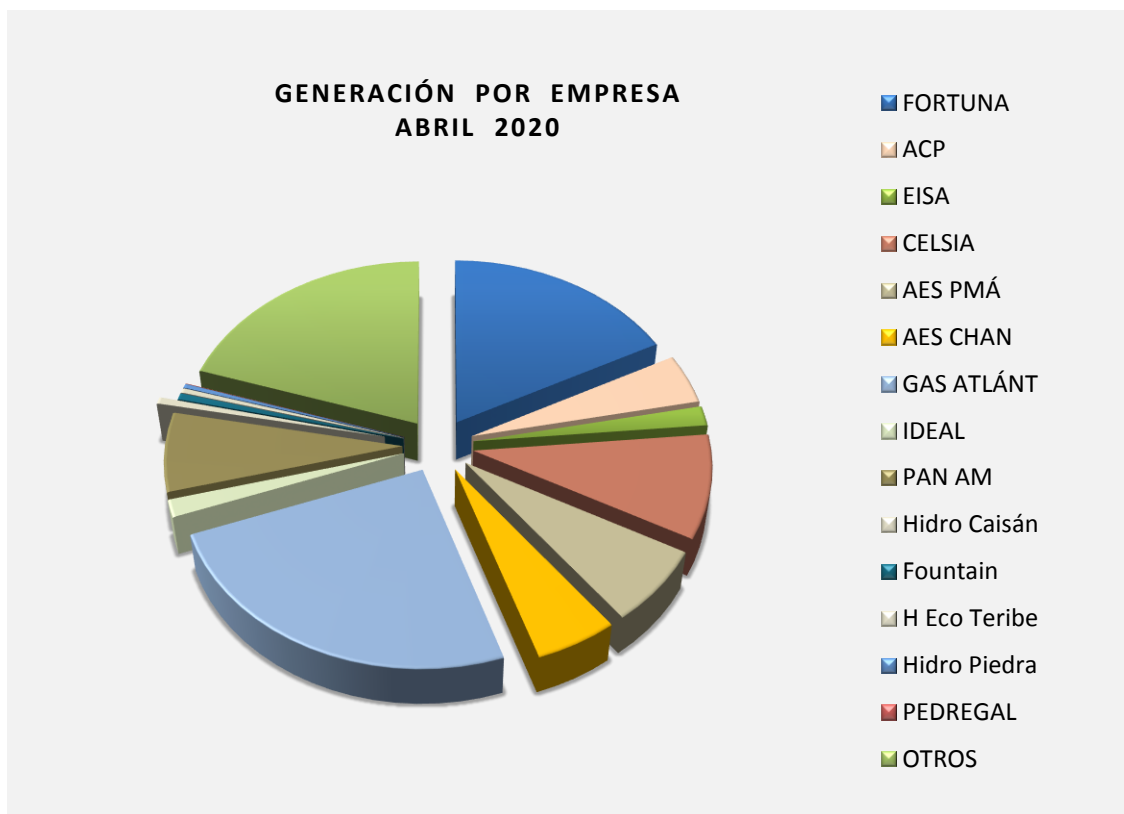


III. GENERACIÓN POR EMPRESA Y PLANTA

| Empresa | Planta | MWh |
|--------------|--------------|-------------------|
| ENEL | Fortuna | 147,313.54 |
| AES Pmá | Bayano | 20,352.99 |
| AES Pmá | Estrella | 4,897.84 |
| AES Pmá | Valles | 5,586.95 |
| AES Pmá | Estí | 26,508.96 |
| AES Pmá | E de Mar | 312.55 |
| AES Chan | Chan | 44,270.78 |
| AES Colón | GANA | 208,493.02 |
| CELSIA | Alternegy | 16,329.26 |
| CELSIA | Bontex | 4,897.06 |
| CELSIA | IDB | 29.82 |
| CELSIA | B L M | 57,866.89 |
| PAN AM | Pan Am | 60,392.90 |
| PEDREGAL | Pacora | 214.09 |
| IDEAL | Ideal | 13,144.82 |
| Hidro Caisán | El Alto | 4,992.30 |
| Fountain | Bajo Frío | 4,855.66 |
| Eco Teribe | Bonyic | 3,555.58 |
| Hidro Piedra | RP 490 | 3,041.31 |
| ACP | ACP | 37,905.15 |
| EISA | M Lirio | 14,901.01 |
| OTROS | Otros | 169,916.71 |
| | TOTAL | 849,779.22 |



| Empresa | MWh | % |
|--------------|-------------------|----------------|
| FORTUNA | 147,313.54 | 17.34% |
| ACP | 37,905.15 | 4.46% |
| EISA | 14,901.01 | 1.75% |
| CELSIA | 79,123.04 | 9.31% |
| AES PMÁ | 57,659.29 | 6.79% |
| AES CHAN | 44,270.78 | 5.21% |
| GAS ATLÁNT | 208,493.02 | 24.53% |
| IDEAL | 13,144.82 | 1.55% |
| PAN AM | 60,392.90 | 7.11% |
| Hidro Caisán | 4,992.30 | 0.59% |
| Fountain | 4,855.66 | 0.57% |
| H Eco Teribe | 3,555.58 | 0.42% |
| Hidro Piedra | 3,041.31 | 0.36% |
| PEDREGAL | 214.09 | 0.03% |
| OTROS | 169,916.71 | 20.00% |
| TOTAL | 849,779.22 | 100.00% |

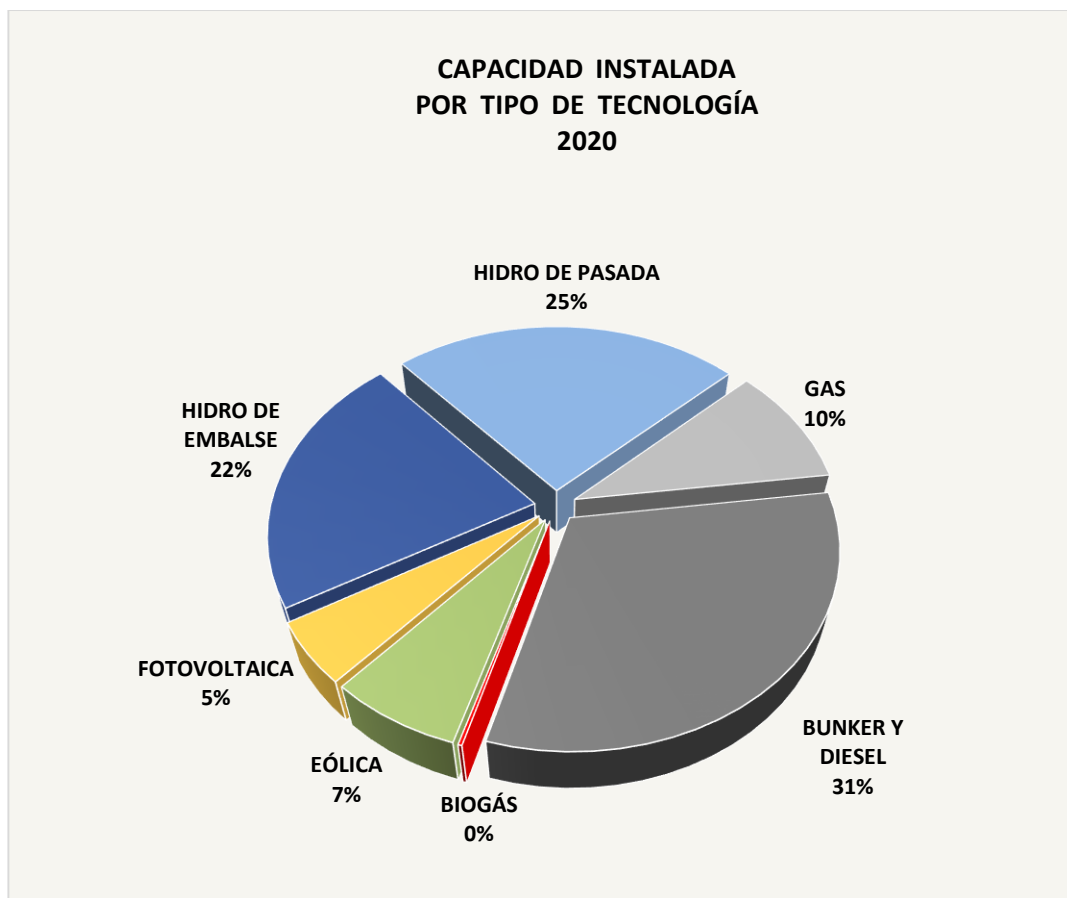


| Empresa | OTROS | |
|------------------|---------------|------------|
| | Planta | MWh |
| Alto valle | A Valle | 1,441.71 |
| Café Eleta | Caldeco | 876.24 |
| San Lorenzo | S Lorenzo | 599.99 |
| Pedregalito | Pedregalito | 1,056.34 |
| Río Chico | Río Chico | 511.89 |
| Paso Ancho | P Ancho | 913.79 |
| Istmus | Concepción | 1,644.35 |
| Perlas Norte | P Norte | 1,710.53 |
| Perlas Sur | P Sur | 1,716.13 |
| Saltos Francolí | Planetas | 475.69 |
| Hidro Ibérica | El Fraile | 802.33 |
| Emnadesa | Bugaba | 646.79 |
| Hidro Boquerón | Macano | 1,181.29 |
| Electrogen Istmo | Mendre 2 | 349.92 |
| Esepsa | Yeguada | 2,577.96 |
| Esepsa | Dolega | 270.77 |
| Esepsa | M Monte | 176.85 |
| Esepsa | Algarrobos | 472.88 |
| Hidro Panamá | Antón | 374.93 |
| Hid Candela | Hid Candela | 1.50 |
| UEP I | UEP I | 13,497.30 |
| UEP II | UEP II | 57,866.89 |
| Genisa | Genisa | 1,925.18 |
| Corp Istmo | Corp Istmo | 939.65 |
| Urbalia | Urbalia | 37,905.15 |
| Kanan | Kanan | 13,497.30 |
| Jinro | Jinro | 214.09 |

| Empresa | OTROS | |
|-----------------------|------------------|-------------------|
| | Planta | MWh |
| Bajos del Totuma | Bajos Totuma | 632.61 |
| Desarrollos Hidroelec | San Andrés | 757.41 |
| EGESA | Sarigua | 247.60 |
| Energyst | Energyst | 0.00 |
| Tropitérmica | Tropitérmica | 2,767.62 |
| Feisa | Feisa | 791.59 |
| P S Z 1 | P S Z 1 | 1,091.41 |
| El Fraile Solar | El Fraile | 94.44 |
| Solar Uno | Solar Uno | 478.14 |
| Solar Istmo | Solar Istmo | 540.97 |
| Bugaba Solar | Bugaba Solar | 177.16 |
| Canopo Solar | Canopo Solar | 44.62 |
| Azuero Venture | Azuero Venture | 1,850.90 |
| Coclé Venture | Coclé Venture | 1,720.53 |
| Panamá Venture | Pmá Venture | 1,601.23 |
| G Solar | Albrook | 2.56 |
| Enel | San Juan | 476.57 |
| Azucarera | Coclé Solar | 56.25 |
| Panasolar | Panasolar | 1,341.91 |
| Llano Sánchez | Ll. Sánchez | 2,600.81 |
| Farallón Solar 2 | Farallón 2 | 713.82 |
| Divisa Solar | D Solar | 1,165.14 |
| Tecnisol | Tecnisol 1 2 3 4 | 6,779.43 |
| C Solar | C Solar | 98.04 |
| Estrella Solar | Estrella Solar | 238.57 |
| TOTAL | | 169,916.71 |

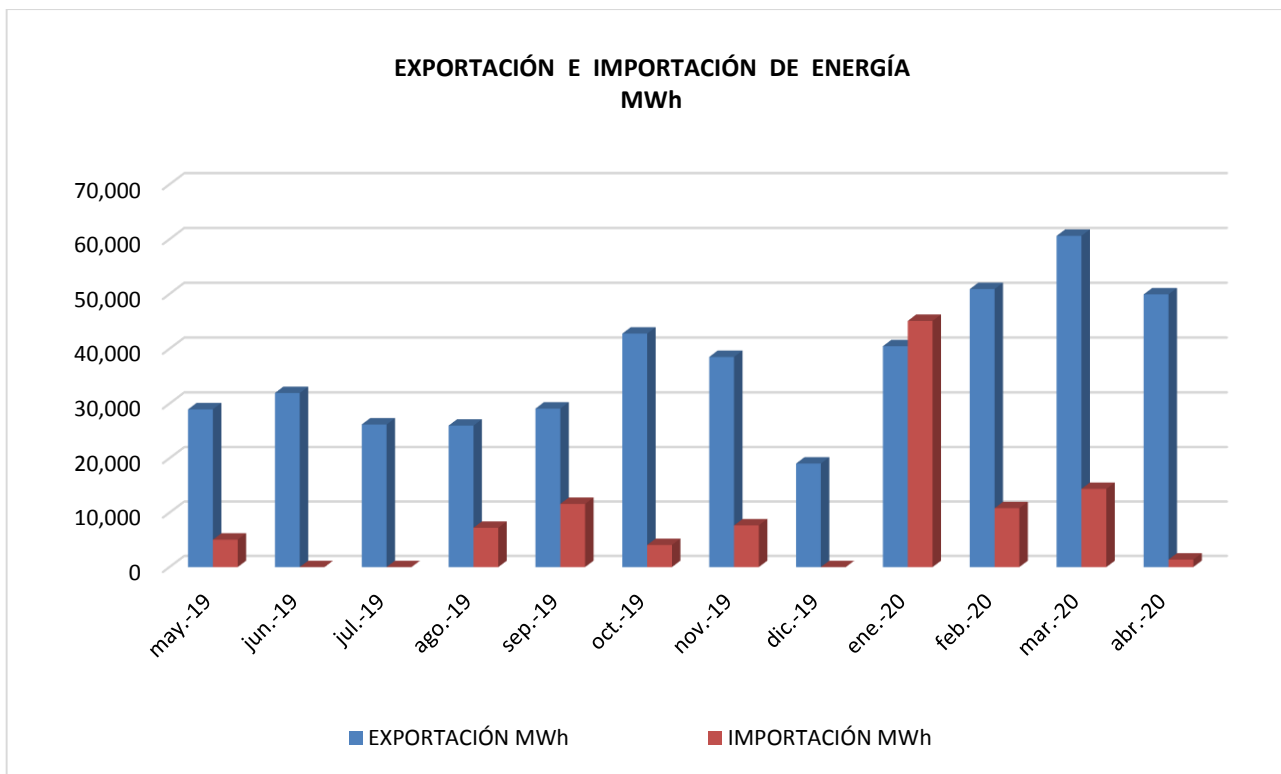
IV. CAPACIDAD INSTALADA POR TIPO DE TECNOLOGÍA

| TIPO DE TECNOLOGÍA | MW | % |
|--------------------|-----------------|-------------|
| HIDRO DE EMBALSE | 842.17 | 22% |
| HIDRO DE PASADA | 949.28 | 25% |
| GAS | 381.00 | 10% |
| BUNKER Y DIESEL | 1,216.79 | 32% |
| BIOGÁS | 8.10 | 0% |
| EÓLICA | 270.00 | 7% |
| FOTOVOLTAICA | 194.61 | 5% |
| TOTAL | 3,861.95 | 100% |



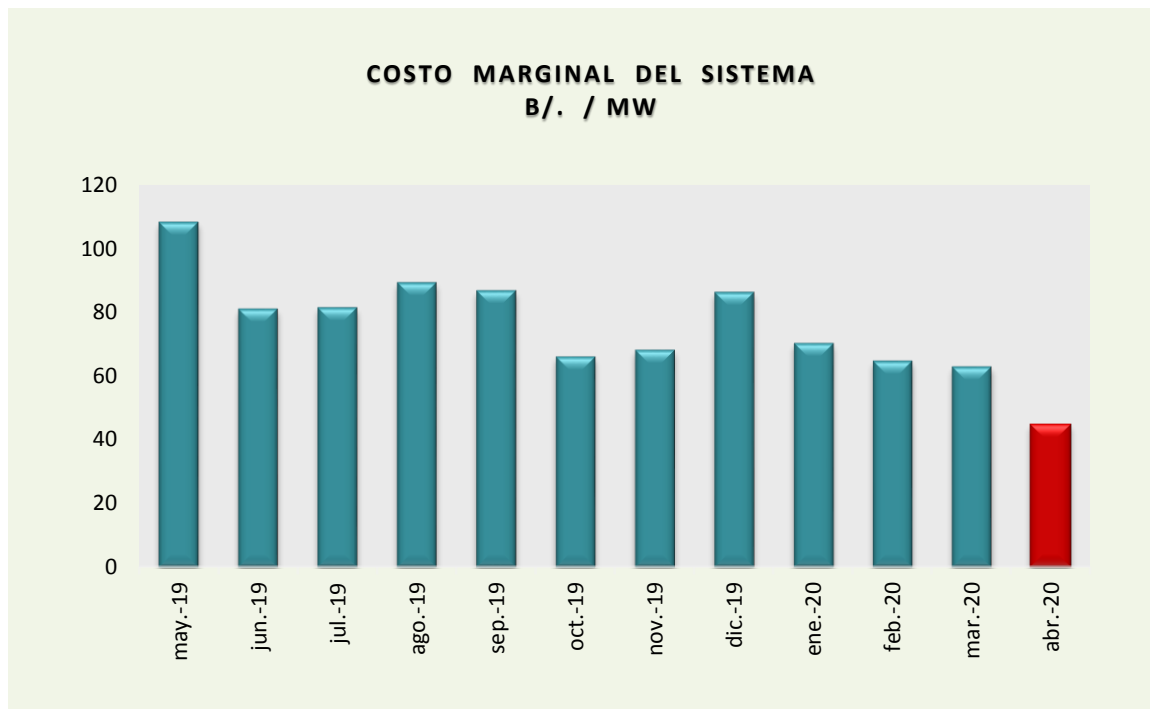
V. IMPORTACIONES Y EXPORTACIONES

| | EXPORTACIÓN MWh | IMPORTACIÓN MWh |
|--------|--------------------|--------------------|
| may-19 | 28,953.95 | 5,043.08 |
| jun-19 | 31,925.03 | 0.00 |
| jul-19 | 26,183.36 | 0.00 |
| ago-19 | 25,977.99 | 7,221.89 |
| sep-19 | 29,086.24 | 11,613.07 |
| oct-19 | 42,772.19 | 4,068.68 |
| nov-19 | 38,504.94 | 7,665.63 |
| dic-19 | 19,030.11 | 0.00 |
| ene-20 | 40,463.89 | 45,086.38 |
| feb-20 | 50,897.51 | 10,832.32 |
| mar-20 | 60,614.07 | 14,370.84 |
| abr-20 | 49,928.06 | 1,378.41 |



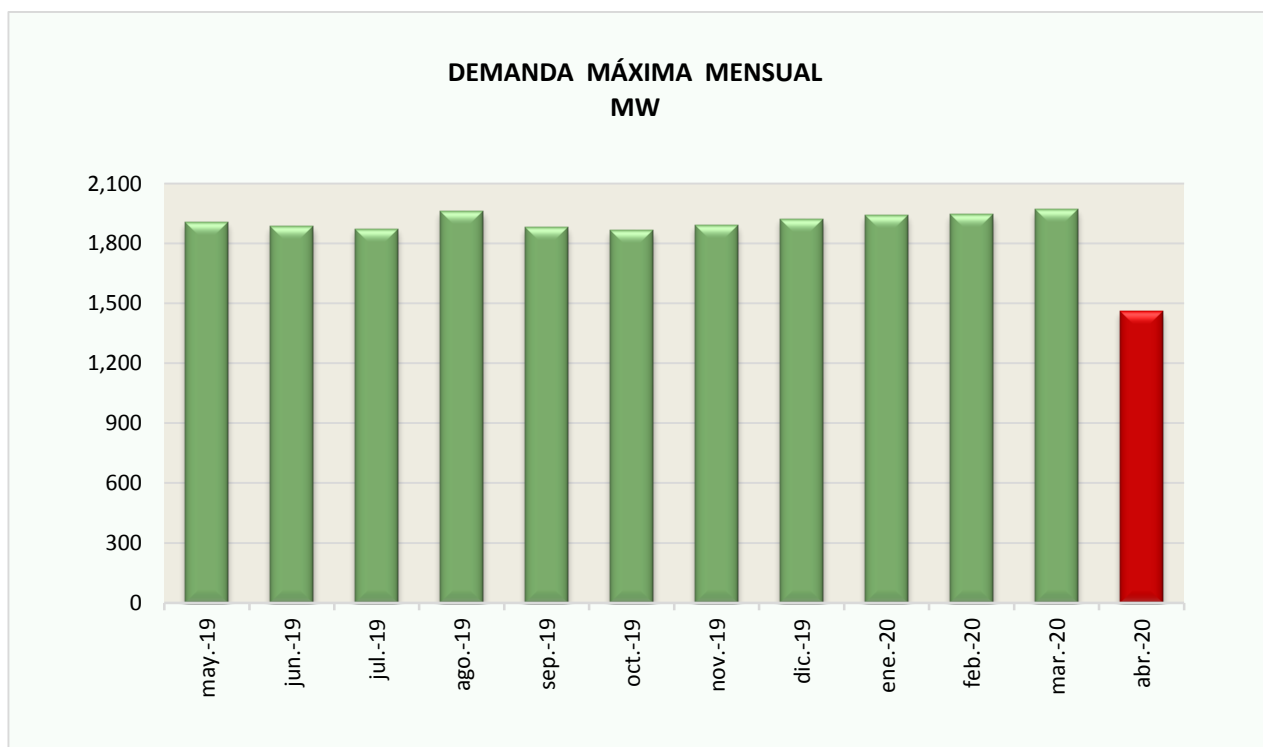
VI. COSTO MARGINAL DEL SISTEMA

| mes | C M S B/. / MWh |
|---------------|--------------------|
| may-19 | 108.2 |
| jun-19 | 81.01 |
| jul-19 | 81.45 |
| ago-19 | 89.31 |
| sep-19 | 86.73 |
| oct-19 | 66.03 |
| nov-19 | 68.15 |
| dic-19 | 86.25 |
| ene-20 | 70.22 |
| feb-20 | 64.75 |
| mar-20 | 62.87 |
| abr-20 | 44.75 |



VII. DEMANDA MÁXIMA MENSUAL Y ANUAL

| mes | Demanda Máxima |
|---------------|-------------------|
| may-19 | 1,907 |
| jun-19 | 1,884 |
| jul-19 | 1,873 |
| ago-19 | 1,961 |
| sep-19 | 1,881 |
| oct-19 | 1,865 |
| nov-19 | 1,891 |
| dic-19 | 1,924 |
| ene-20 | 1,941 |
| feb-20 | 1,944 |
| mar-20 | 1,969 |
| abr-20 | 1,461 |



VIII. COSTO DE ENERGÍA Y POTENCIA HIDRO TÉRMICA, EÓLICA Y FOTOVOLTAICA

| ABRIL | EDEMET | | | | ENSA | | | |
|----------------------|---------------|---------------|----------------|---------------|--------------|--------------|----------------|---------------|
| | HIDRO | TÉRMICA | EÓLICA Y SOLAR | TOTAL | HIDRO | TÉRMICA | EÓLICA Y SOLAR | TOTAL |
| COSTO POTENCIA (B/.) | 6,205,763.33 | 11,701,303.36 | 0.00 | 17,907,066.69 | 3,062,182.35 | 4,148,725.40 | 0.00 | 7,210,907.75 |
| COSTO ENERGÍA (B/.) | 12,309,446.10 | 3,812,480.32 | 2,759,474.36 | 18,881,400.79 | 6,735,552.99 | 4,864,258.23 | 1,282,331.80 | 12,882,143.02 |
| COSTO TOTAL (B/.) | 18,515,209.43 | 15,513,783.68 | 2,759,474.36 | 36,788,467.48 | 9,797,735.34 | 9,012,983.63 | 1,282,331.80 | 20,093,050.77 |
| ENERGÍA (MWh) | 158,865.01 | 115,414.97 | 26,902.17 | 301,182.14 | 88,180.46 | 110,025.27 | 22,731.87 | 220,937.61 |
| MONÓMICO (B/. /MWh) | 116.55 | 134.42 | 102.57 | 122.15 | 111.11 | 81.92 | 56.41 | 90.94 |

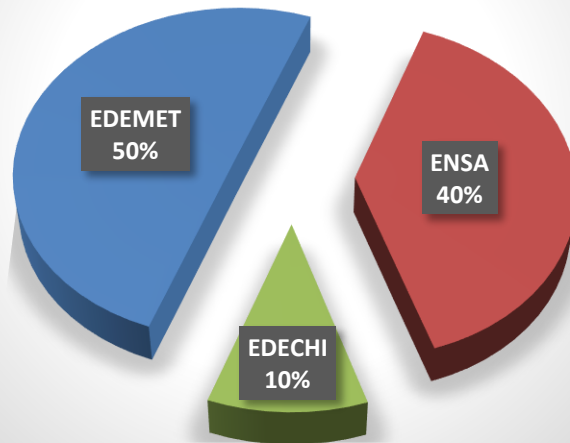
| ABRIL | EDECHI | | | | TOTAL | | | |
|----------------------|--------------|--------------|----------------|--------------|---------------|---------------|----------------|---------------|
| | HIDRO | TÉRMICA | EÓLICA Y SOLAR | TOTAL | HIDRO | TÉRMICA | EÓLICA Y SOLAR | TOTAL |
| COSTO POTENCIA (B/.) | 393,555.19 | 1,930,570.96 | 0.00 | 2,324,126.15 | 9,661,500.87 | 17,780,599.72 | 0.00 | 27,442,100.60 |
| COSTO ENERGÍA (B/.) | 2,511,721.36 | 1,030,534.34 | 911,967.81 | 4,454,223.51 | 21,556,720.45 | 9,707,272.89 | 4,953,773.97 | 36,217,767.31 |
| COSTO TOTAL (B/.) | 2,905,276.56 | 2,961,105.30 | 911,967.81 | 6,778,349.66 | 31,218,221.33 | 27,487,872.61 | 4,953,773.97 | 63,659,867.91 |
| ENERGÍA (MWh) | 30,007.82 | 24,556.75 | 8,864.17 | 63,428.75 | 277,053.29 | 249,996.99 | 58,498.21 | 585,548.49 |
| MONÓMICO (B/. /MWh) | 96.82 | 120.58 | 102.88 | 106.87 | 112.68 | 109.95 | 84.68 | 108.72 |

IX. CLIENTES, VENTAS E INGRESOS POR DISTRIBUIDORA

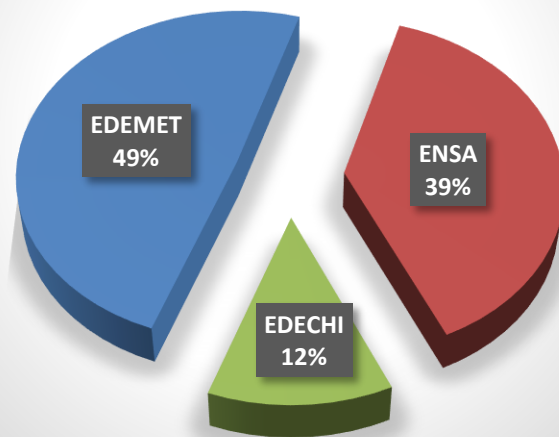
| ABRIL | NÚMERO DE CLIENTES | VENTAS (kWh) | INGRESOS US \$ |
|--------------|---------------------------|---------------------|-----------------------|
| EDEMET | 522,808 | 279,225,310 | 53,900,502 |
| ENSA | 467,058 | 232,255,462 | 42,341,882 |
| EDECHI | 163,400 | 67,152,262 | 13,538,378 |
| TOTAL | 1,153,266 | 578,633,034 | 109,780,762 |



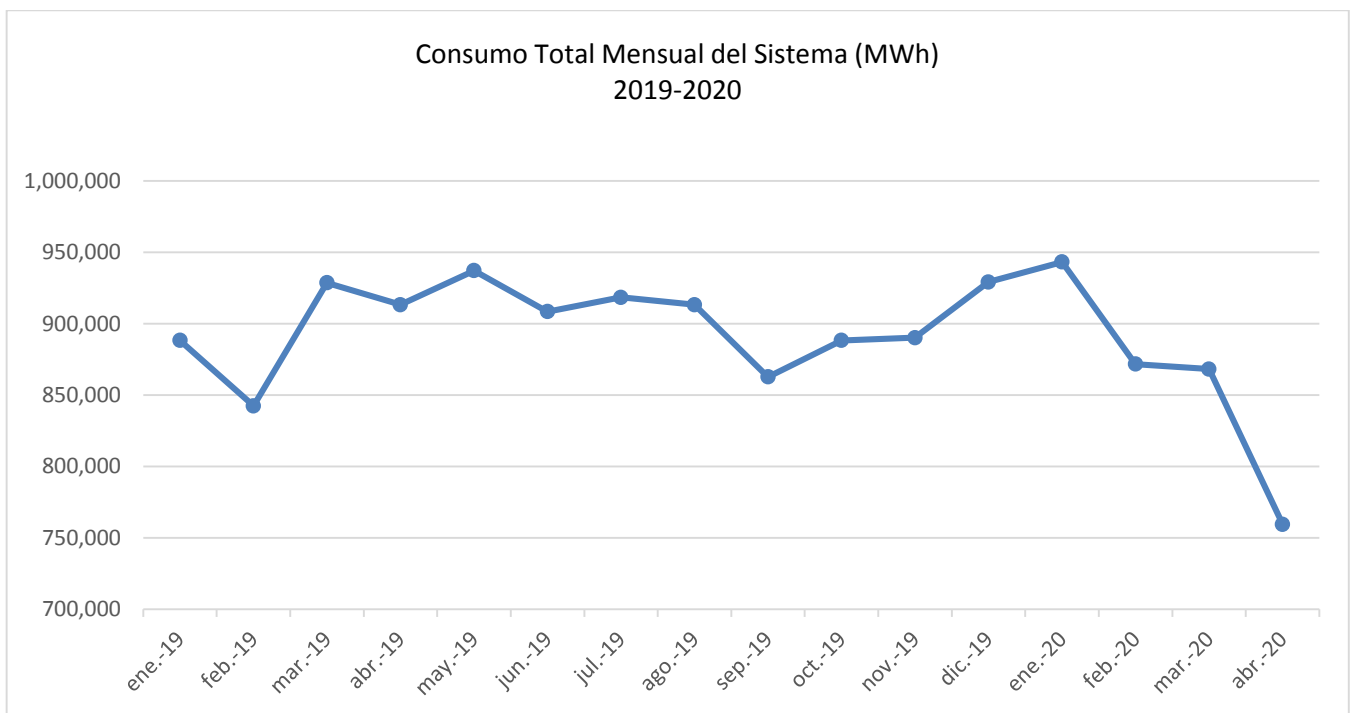
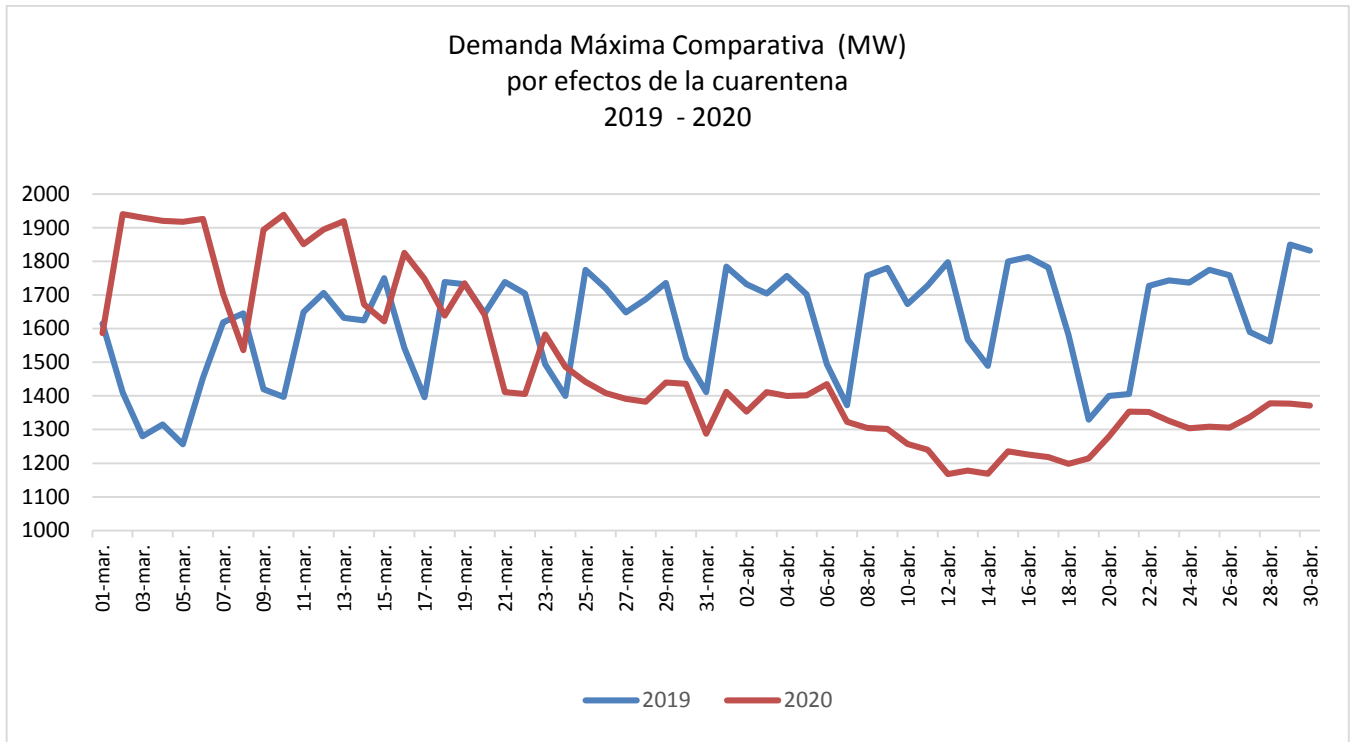
**VENTAS DE ENERGÍA POR EMPRESA
ABRIL 2020**



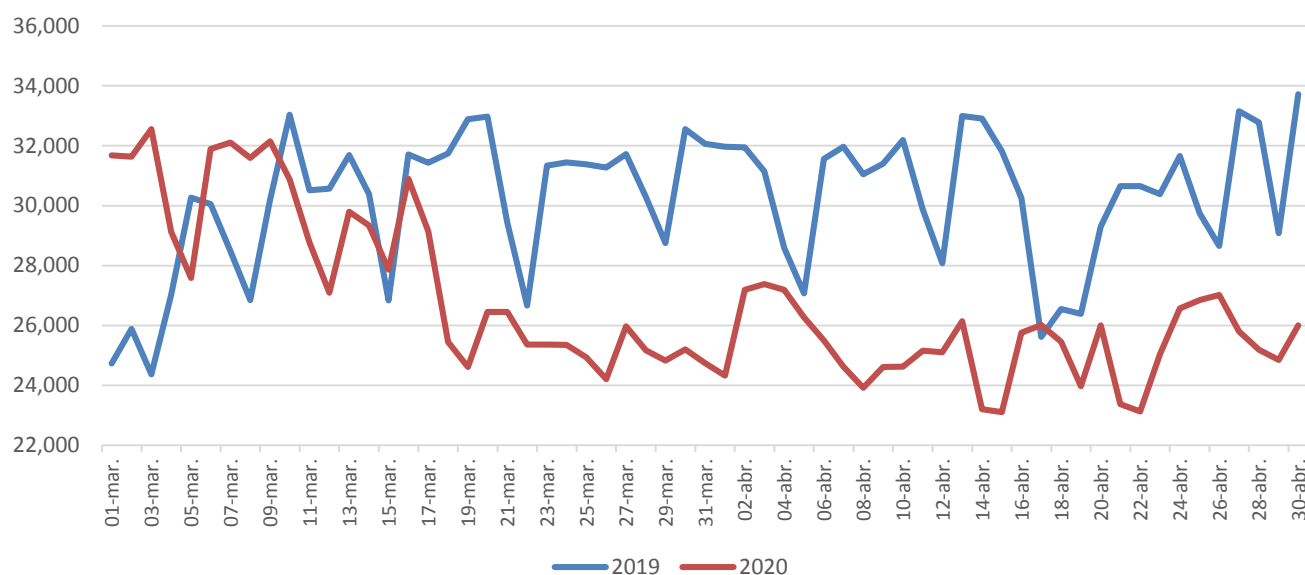
**INGRESOS POR EMPRESA
ABRIL 2020**



X. EFECTOS DE LA CUARENTENA EN EL SECTOR ELÉCTRICO PANAMEÑO



**Consumo (MWh) Comparativo
por efectos de la cuarentena
2019 - 2020**



**PORCENTAJES DE EXPORTACIONES E IMPORTACIONES
enero 2019 - abril 2020**

