

Anexo 15

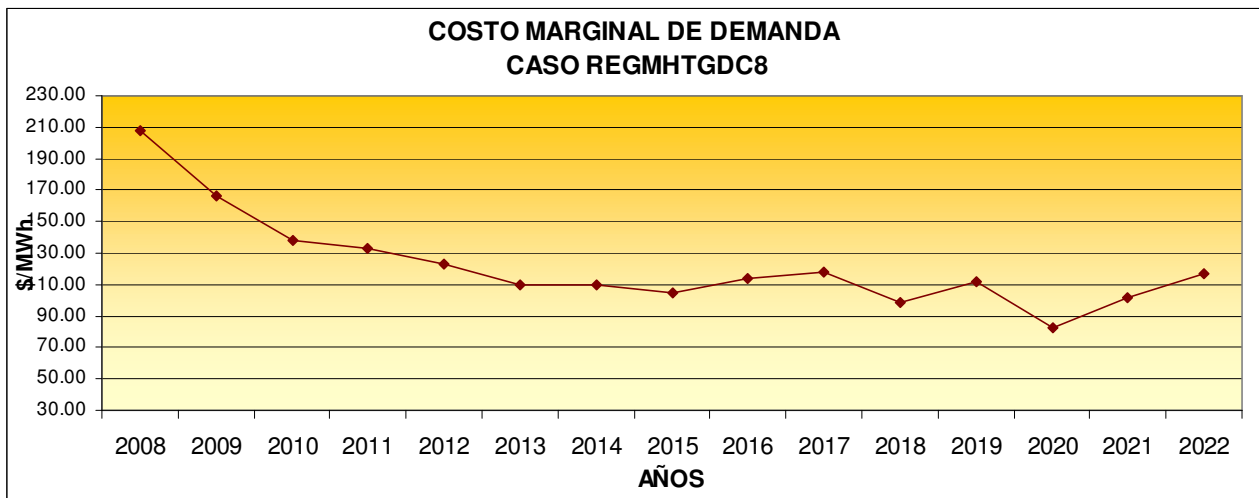
Salidas del Caso REGMHTGDC8:
Medio Hidrotérmico con Carbón y Gas
vía Gasoducto a partir de 2015.



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CUADRO No.A3.1: Costos marginales del caso REGMHTGDC8

| COSTO MARGINAL DE DEMANDA EN \$/MWh | | | | | | | | | | | | | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|---------------|---------------|
| Año | Ene | Feb | Mar | Abr | May | Jun | Jul | Ago | Sep | Oct | Nov | Dic | Prom |
| 2008 | 198.33 | 201.15 | 199.63 | 268.76 | 262.72 | 211.23 | 204.16 | 200.64 | 194.18 | 189.75 | 178.97 | 182.29 | 207.65 |
| 2009 | 176.53 | 181.62 | 199.47 | 225.54 | 194.60 | 168.02 | 154.96 | 155.08 | 145.75 | 136.68 | 129.74 | 131.77 | 166.65 |
| 2010 | 130.73 | 137.72 | 141.86 | 159.90 | 156.50 | 140.20 | 133.54 | 135.90 | 131.05 | 132.41 | 127.05 | 127.39 | 137.85 |
| 2011 | 129.80 | 137.39 | 163.89 | 171.74 | 144.63 | 128.16 | 122.24 | 122.66 | 118.75 | 118.76 | 119.56 | 119.08 | 133.06 |
| 2012 | 119.48 | 127.63 | 152.67 | 179.40 | 149.84 | 118.17 | 112.89 | 107.82 | 98.99 | 99.50 | 99.07 | 108.10 | 122.80 |
| 2013 | 100.39 | 121.90 | 138.41 | 175.49 | 144.58 | 106.20 | 86.46 | 91.69 | 79.97 | 89.11 | 84.40 | 95.47 | 109.51 |
| 2014 | 112.78 | 127.53 | 138.14 | 154.54 | 135.62 | 113.22 | 100.51 | 100.91 | 82.43 | 85.71 | 76.51 | 94.53 | 110.20 |
| 2015 | 102.32 | 114.71 | 131.50 | 145.37 | 126.08 | 107.06 | 93.99 | 95.20 | 80.67 | 79.37 | 85.41 | 94.03 | 104.64 |
| 2016 | 111.55 | 127.49 | 145.45 | 154.47 | 135.29 | 111.67 | 100.71 | 104.11 | 85.23 | 94.33 | 94.48 | 104.72 | 114.12 |
| 2017 | 121.78 | 136.81 | 153.23 | 173.17 | 149.47 | 119.88 | 106.67 | 103.12 | 82.83 | 82.61 | 86.66 | 100.76 | 118.08 |
| 2018 | 95.71 | 118.18 | 143.50 | 174.40 | 148.36 | 95.06 | 66.41 | 87.19 | 59.63 | 63.04 | 60.52 | 75.05 | 98.92 |
| 2019 | 102.96 | 122.97 | 160.79 | 170.15 | 146.92 | 120.08 | 107.28 | 100.09 | 72.47 | 78.27 | 79.40 | 81.91 | 111.94 |
| 2020 | 73.81 | 85.88 | 114.60 | 146.58 | 125.24 | 66.89 | 62.31 | 67.36 | 60.65 | 59.49 | 59.95 | 66.70 | 82.45 |
| 2021 | 77.86 | 103.91 | 140.77 | 147.64 | 137.34 | 109.85 | 94.75 | 97.36 | 68.62 | 86.39 | 73.68 | 78.29 | 101.37 |
| 2022 | 104.45 | 117.28 | 151.93 | 186.65 | 156.59 | 114.71 | 104.28 | 108.36 | 85.61 | 92.00 | 89.69 | 96.45 | 117.33 |
| Prom | 117.23 | 130.81 | 151.72 | 175.59 | 154.25 | 122.03 | 110.08 | 111.83 | 96.46 | 99.16 | 96.34 | 103.77 | |



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CUADRO No.A3.2: Informe final de generación del caso REGMHTGDC8

| CASO : REGMHTGDC8 | | | | | | | | | | | | | | | |
|---|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Informe Final de Generación en GWh | | | | | | | | | | | | | | | |
| Planta | Total por año | | | | | | | | | | | | | | |
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Fortuna | 1604.5 | 1544.5 | 1556.6 | 1788.9 | 1620.4 | 1635.1 | 1649.8 | 1635.0 | 1571.5 | 1572.7 | 1498.8 | 1570.1 | 1545.0 | 1605.1 | 1663.3 |
| Bayano | 542.19 | 516.23 | 562.14 | 756.77 | 507.45 | 433.08 | 581.03 | 413.54 | 501.49 | 522.02 | 390.25 | 508.46 | 411.03 | 576.12 | 479.29 |
| La Estrella | 224.65 | 246.53 | 259.74 | 244.93 | 252.77 | 259.3 | 253.68 | 240.09 | 247.15 | 226.83 | 256.59 | 241.7 | 233.26 | 241.36 | 267.96 |
| Los Valles | 275.38 | 297.85 | 292.19 | 286.82 | 294.4 | 302.93 | 291.17 | 277.64 | 295.79 | 266.33 | 296.01 | 281.8 | 281.11 | 279.13 | 308.47 |
| Estí | 902.24 | 905.6 | 913.71 | 927 | 900.82 | 895.48 | 909.49 | 900.66 | 895.2 | 888.43 | 896.39 | 896.17 | 907.57 | 893.42 | 923.27 |
| Gualaca | 0 | 0 | 0 | 183.43 | 178.75 | 177.52 | 180.79 | 179.03 | 177.91 | 176.59 | 178.35 | 178 | 180.38 | 177.64 | 182.94 |
| Lorena | 0 | 0 | 0 | 0 | 247.41 | 245.71 | 250.24 | 247.8 | 246.26 | 244.42 | 246.86 | 246.38 | 249.67 | 245.88 | 253.21 |
| Prudencia | 0 | 0 | 0 | 0 | 0 | 368.89 | 380.53 | 376.24 | 374.74 | 373.89 | 373.91 | 375.19 | 377.25 | 369.37 | 384.38 |
| Pando | 0 | 0 | 0 | 0 | 0 | 0 | 187.22 | 182.08 | 189.39 | 184.3 | 183.48 | 184.65 | 187.92 | 182.21 | 187.19 |
| Monte Lirio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 299.55 | 302.73 | 304.87 | 304.87 | 294.07 | 300.26 |
| Chan I | 0 | 0 | 0 | 1008.8 | 1266.7 | 1347.2 | 1295.3 | 1334.6 | 1276 | 1243 | 1246.1 | 1262.7 | 1260.6 | 1217 | 1365.8 |
| Bonyic | 0 | 0 | 0 | 172.03 | 171.67 | 177.59 | 173.15 | 178.6 | 168.36 | 165.73 | 171.26 | 165.79 | 170.3 | 168.68 | 170.8 |
| Bajo de Mina | 0 | 0 | 0 | 0 | 349.71 | 347.17 | 354.33 | 345.13 | 351.62 | 354.19 | 350.6 | 352.13 | 348.27 | 347.15 | 354.85 |
| Siíndigo | 0 | 0 | 0 | 0 | 0 | 0 | 57.76 | 55.46 | 59.827 | 56.527 | 56.499 | 54.987 | 53.655 | 57.783 | 56.884 |
| El Alto | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.47 | 275.4 | 282.99 | 279.7 | 279.71 | 288.78 |
| Mendre | 0 | 0 | 0 | 114.25 | 115.06 | 111.25 | 115.54 | 116.1 | 115.56 | 108.02 | 108.16 | 108.41 | 108.1 | 112.93 | 114.69 |
| Barro Blanco | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 105.33 | 106.03 | 107.02 | 101.1 | 100.11 | 101.46 | 99.203 | 106.43 |
| Baitún | 0 | 0 | 0 | 0 | 0 | 622.71 | 632.92 | 605.32 | 617.66 | 624.01 | 617.14 | 621.62 | 610.15 | 615.2 | 618.34 |
| Tabasará II | 0 | 0 | 0 | 0 | 165.95 | 161.38 | 169.83 | 199.05 | 205.59 | 208.45 | 203.09 | 197.06 | 205.66 | 196.34 | 208.67 |
| BLM #2 | 197.57 | 86.006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BLM #3 | 196.69 | 85.239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BLM #4 | 196.65 | 83.16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ciclo-C BLM | 654.44 | 258.76 | 8.0863 | 23.297 | 19.535 | 24.409 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Copesa | 70.06 | 12.882 | 0 | 0 | 1.2679 | 1.2679 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.9237 |
| EGESA-TG | 5.0632 | 3.6447 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.2035 |
| PanAm | 735.81 | 673.71 | 525.59 | 256.47 | 166.02 | 104.19 | 103.52 | 61.259 | 94.093 | 140.77 | 92.5 | 104.67 | 40.122 | 48.272 | 92.062 |
| BLM-Carbón | 0 | 0 | 946.08 | 946.08 | 931.46 | 888.43 | 897.13 | 904.27 | 914.1 | 907.7 | 904.57 | 915.03 | 926.64 | 936.92 | 936.37 |
| CCGD-BLM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1111.7 | 1148.8 | 1124 | 991.56 | 1039.6 | 896.51 | 1044.6 | 1039.6 |
| CB 250A | 0 | 0 | 0 | 0 | 1844.1 | 1810.9 | 1804.7 | 1806.8 | 1829.2 | 1827.7 | 1825.7 | 1834.8 | 1852.4 | 1855.6 | 1860.6 |
| CCGN 250A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1644.4 | 1735.9 | 1794.8 | 1856.2 | 1841.8 |
| CCGN 250B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1601.5 | 1736.8 | 1712.3 |
| PACORA-PP | 421.8 | 418.5 | 409.46 | 297.3 | 184.4 | 134.34 | 138.13 | 93.243 | 108.32 | 123.27 | 86.292 | 98.293 | 42.812 | 74.039 | 104.77 |
| ACP1 | 339.54 | 339.54 | 338.48 | 336.1 | 299.27 | 239.46 | 250.11 | 224.74 | 250.6 | 244.33 | 152.23 | 204.6 | 80.36 | 151.88 | 188.81 |
| ACP 2 | 58.537 | 33.051 | 3.7725 | 7.5434 | 6.1826 | 4.4635 | 2.2029 | 1.1899 | 2.115 | 5.4975 | 4.8008 | 5.9343 | 1.6003 | 2.2319 | 4.2796 |
| ACP 3 | 3.0926 | 3.8856 | 0 | 0 | 0.5962 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1923 |
| ACP 4 | 86.795 | 46.796 | 2.0156 | 5.741 | 8.6133 | 6.943 | 2.9392 | 1.4803 | 2.6892 | 7.6441 | 8.2093 | 9.4929 | 2.7433 | 2.8682 | 6.7365 |
| El Giral | 105.94 | 364.04 | 261.04 | 143.7 | 101.83 | 75.551 | 64.143 | 52.445 | 70.523 | 84.753 | 70.094 | 75.834 | 44.21 | 52.577 | 64.506 |
| T.Cativá | 145.68 | 679.82 | 629.38 | 420.52 | 270 | 197.66 | 220.66 | 159.75 | 191.52 | 229.07 | 175.04 | 189.02 | 118.77 | 140.87 | 182.41 |
| Termo Colón | 0 | 565.33 | 960.47 | 863.98 | 665.81 | 504.8 | 471.44 | 318.88 | 420.44 | 464.54 | 284.49 | 359.3 | 134.1 | 235.64 | 387.46 |
| Pana Power | 0 | 0 | 2.1073 | 2.6041 | 2.9076 | 8.1587 | 0.8534 | 3.1797 | 0.6188 | 2.7771 | 0 | 0.9608 | 0.5643 | 2.1073 | 14.869 |
| Total Hidro | 3549 | 3511 | 3584 | 5483 | 6071 | 7085 | 7483 | 7392 | 7400 | 7607 | 7750 | 7931 | 7816 | 7958 | 8235 |
| Total Term. | 3217.7 | 3654.4 | 4086.5 | 3303.3 | 4502 | 4000.6 | 3955.8 | 4738.9 | 5033 | 5162.1 | 6239.9 | 6573.4 | 7537.1 | 8140.6 | 8441.9 |
| Total Gener | 6767 | 7165 | 7671 | 8786 | 10573 | 11086 | 11439 | 12131 | 12433 | 12769 | 13989 | 14504 | 15353 | 16099 | 16677 |
| Import. | 168 | 338 | 494 | 217 | 29 | 41 | 77 | 49 | 63 | 110 | 50 | 70 | 62 | 42 | 53 |
| Export. | 159 | 170 | 207 | 586 | 1705 | 1743 | 1642 | 1810 | 1600 | 1427 | 2007 | 1932 | 2136 | 2209 | 2123 |
| Pérdidas | 5 | 10 | 15 | 6 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 2 |
| Demanda | 6773 | 7323 | 7944 | 8410 | 8896 | 9383 | 9872 | 10368 | 10895 | 11449 | 12031 | 12641 | 13278 | 13931 | 14606 |
| Déficit | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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