

COMISIÓN DE REGULACIÓN DE ENERGÍA Y GAS - CREG

DECLARACIÓN DE PARÁMETROS PARA EL CÁLCULO DE LA ENFICC  
PARA LA VIGENCIA DE DICIEMBRE DE 2013 A NOVIEMBRE DE 2014

Bogotá, agosto 14 de 2009

Formato 1. Plantas o Unidades Hidráulicas

| Nombre | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|--------|------------------------------|----------------------|---------|
| CHIVOR | 1,000.00                     | 6.9730               | 3.4757  |

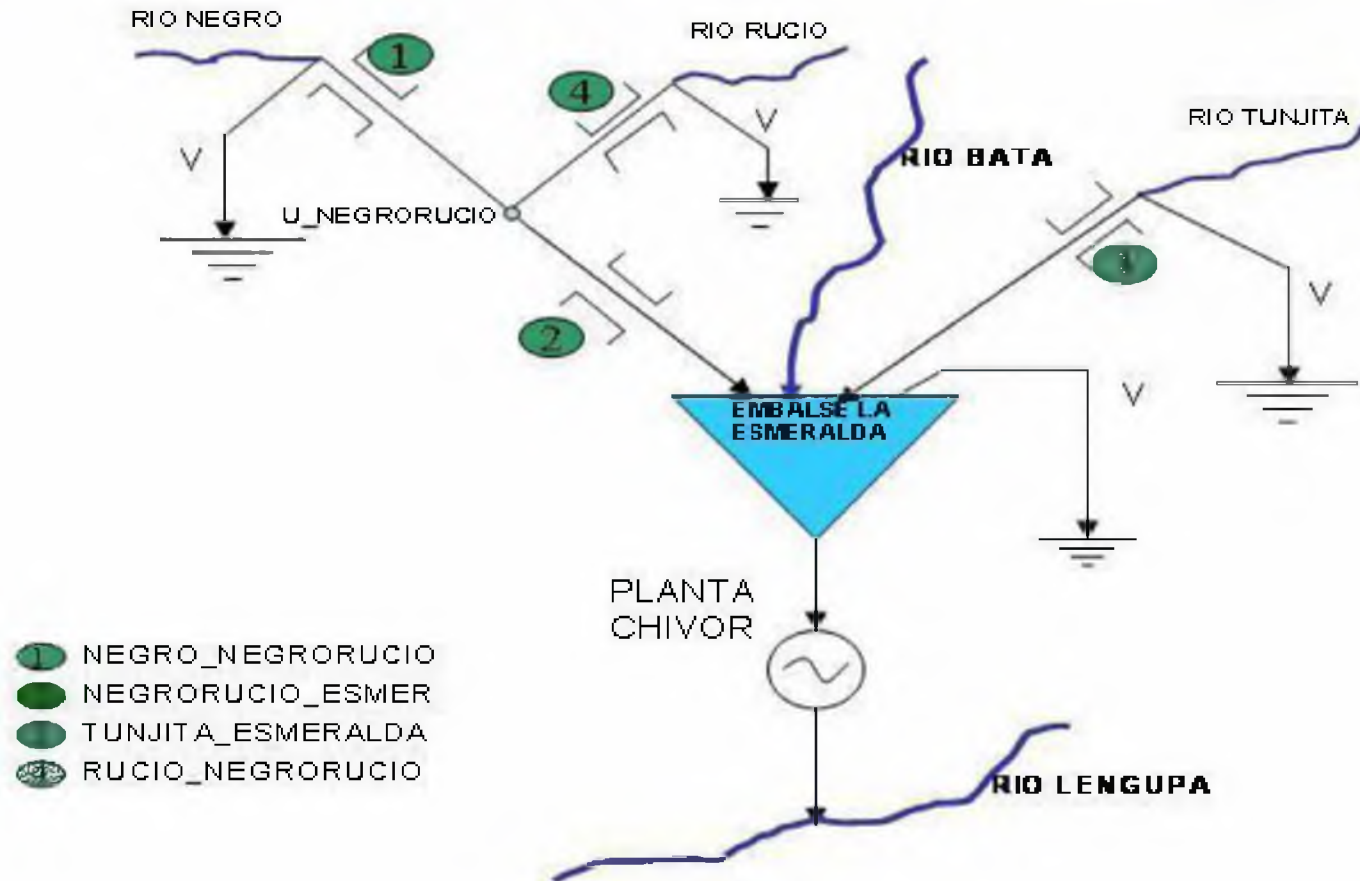
Formato 2. Topología Plantas Hidráulicas

| Nombre Sistema            | Elemento Clase | Elemento Nombre         | Aportes Rio | Aportes Embalse | Aportes Planta | Aportes Otro                                  | Descargas Rio | Descargas Embalse | Descargas Planta | Descargas Otro           | Vertimiento s Rio | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro |
|---------------------------|----------------|-------------------------|-------------|-----------------|----------------|-----------------------------------------------|---------------|-------------------|------------------|--------------------------|-------------------|-----------------------|----------------------|--------------------|
| CADENA H IDRAULICA CHIVOR | AD             | NEGRORUCIO ESMERALDA(2) |             |                 |                | AD_RUCIO_NEGRORUCIO(4)_AD_NEGRO_NEGRORUCIO(1) |               | ESMERALDA         |                  |                          |                   |                       |                      |                    |
| CADENA H IDRAULICA CHIVOR | AD             | NEGRO NEGRO RUCIO(1)    | NEGRO       |                 |                |                                               |               |                   |                  | AD_NEGRO_RUCIO_ESMERALDA |                   |                       |                      | TIERRA             |
| CADENA H IDRAULICA CHIVOR | AD             | RUCIO NEGRO RUCIO(4)    | RUCIO       |                 |                |                                               |               |                   |                  | AD_NEGRO_RUCIO_ESMERALDA |                   |                       |                      | TIERRA             |
| CADENA H IDRAULICA CHIVOR | AD             | TUNJITA ESMERALDA(3)    | TUNJITA     |                 |                |                                               |               | ESMERALDA         |                  |                          |                   |                       |                      | TIERRA             |
| CADENA H IDRAULICA CHIVOR | E              | ESMERALDA               | BATA        |                 |                | AD_NEGRO_RUCIO_ESMERALDA_AD_TUNJITA_ESMERALDA |               |                   | CHIVOR           |                          |                   |                       |                      | TIERRA             |
| CADENA H IDRAULICA CHIVOR | P              | CHIVOR                  |             | ESMERALDA       |                |                                               | LENGUPA       |                   |                  |                          |                   |                       |                      |                    |

## Formato 2a. Diagramas Topología



### TOPOLOGIA CADENA HIDRAULICA CHIVOR



## Formato 3. Plantas o Unidades Térmicas

Formato No Registrado

## Formato 4. Caudal Medio Mensual

| Rio  | Año  | Caudal Enero (m3/s) | Caudal Febrero (m3/s) | Caudal Marzo (m3/s) | Caudal Abril (m3/s) | Caudal Mayo (m3/s) | Caudal Junio (m3/s) | Caudal Julio (m3/s) | Caudal Agosto (m3/s) | Caudal Septiembre (m3/s) | Caudal Octubre (m3/s) | Caudal Noviembre (m3/s) | Caudal Diciembre (m3/s) |
|------|------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| BATA | 1956 | 10.00               | 8.00                  | 10.00               | 23.60               | 39.81              | 124.29              | 92.25               | 136.91               | 81.56                    | 71.85                 | 38.35                   | 21.26                   |
| BATA | 1957 | 10.01               | 7.24                  | 10.19               | 20.55               | 117.85             | 138.74              | 205.79              | 133.65               | 88.54                    | 79.75                 | 60.57                   | 25.00                   |
| BATA | 1958 | 9.45                | 6.04                  | 12.69               | 28.39               | 59.69              | 95.50               | 154.59              | 126.26               | 55.54                    | 31.73                 | 27.84                   | 11.44                   |
| BATA | 1959 | 6.74                | 5.31                  | 8.93                | 19.37               | 61.80              | 116.60              | 202.25              | 279.99               | 124.36                   | 103.94                | 63.87                   | 23.30                   |
| BATA | 1960 | 15.53               | 16.62                 | 9.80                | 23.31               | 55.95              | 92.57               | 164.29              | 204.75               | 108.83                   | 51.30                 | 47.30                   | 46.66                   |
| BATA | 1961 | 11.85               | 7.89                  | 9.68                | 30.97               | 29.87              | 100.93              | 122.40              | 124.63               | 44.70                    | 57.40                 | 63.98                   | 17.71                   |
| BATA | 1962 | 7.29                | 5.51                  | 12.01               | 10.56               | 67.43              | 133.85              | 185.52              | 116.18               | 72.26                    | 54.44                 | 49.37                   | 22.02                   |
| BATA | 1963 | 10.02               | 11.29                 | 8.24                | 40.95               | 128.24             | 126.80              | 140.49              | 170.01               | 87.03                    | 34.38                 | 44.81                   | 18.70                   |
| BATA | 1964 | 7.91                | 5.97                  | 4.77                | 18.11               | 57.34              | 112.45              | 126.06              | 81.14                | 94.26                    | 50.85                 | 54.23                   | 22.48                   |
| BATA | 1965 | 10.97               | 7.48                  | 6.93                | 36.29               | 110.17             | 119.33              | 162.46              | 140.09               | 79.15                    | 71.22                 | 81.40                   | 31.89                   |
| BATA | 1966 | 12.78               | 6.13                  | 16.65               | 20.27               | 25.68              | 52.76               | 102.55              | 83.73                | 63.42                    | 36.26                 | 54.20                   | 45.96                   |
| BATA | 1967 | 14.66               | 8.25                  | 9.16                | 38.93               | 74.82              | 165.01              | 137.93              | 212.73               | 92.20                    | 47.13                 | 39.26                   | 24.28                   |
| BATA | 1968 | 8.95                | 8.30                  | 5.54                | 51.94               | 51.39              | 104.05              | 173.30              | 129.99               | 76.83                    | 58.84                 | 41.81                   | 12.69                   |
| BATA | 1969 | 17.31               | 10.87                 | 7.86                | 37.01               | 71.64              | 90.38               | 144.32              | 105.85               | 45.50                    | 85.99                 | 43.00                   | 20.26                   |
| BATA | 1970 | 22.03               | 14.47                 | 10.73               | 36.08               | 59.62              | 103.66              | 143.81              | 133.51               | 75.09                    | 79.99                 | 44.30                   | 24.65                   |
| BATA | 1971 | 17.83               | 11.45                 | 23.06               | 37.51               | 117.86             | 111.57              | 182.00              | 111.38               | 94.42                    | 52.48                 | 39.74                   | 26.08                   |
| BATA | 1972 | 35.15               | 16.63                 | 16.53               | 71.33               | 123.35             | 135.06              | 154.49              | 97.81                | 99.48                    | 43.58                 | 34.64                   | 13.27                   |
| BATA | 1973 | 7.35                | 5.81                  | 6.35                | 13.42               | 66.51              | 76.39               | 107.59              | 106.55               | 136.94                   | 73.86                 | 79.91                   | 31.98                   |
| BATA | 1974 | 10.93               | 11.57                 | 13.63               | 36.31               | 55.42              | 67.29               | 127.65              | 118.07               | 60.46                    | 52.23                 | 51.03                   | 16.41                   |
| BATA | 1975 | 7.26                | 6.31                  | 10.52               | 16.16               | 38.56              | 109.24              | 78.42               | 113.65               | 61.63                    | 59.27                 | 57.09                   | 47.43                   |
| BATA | 1976 | 15.62               | 9.61                  | 23.80               | 53.31               | 114.84             | 178.78              | 187.15              | 118.98               | 76.25                    | 67.98                 | 67.58                   | 31.41                   |
| BATA | 1977 | 9.76                | 8.39                  | 7.84                | 24.42               | 50.82              | 96.42               | 113.76              | 93.97                | 107.32                   | 62.56                 | 65.37                   | 15.27                   |
| BATA | 1978 | 7.30                | 7.39                  | 9.14                | 54.27               | 63.41              | 121.83              | 102.90              | 124.58               | 83.41                    | 69.59                 | 31.78                   | 20.04                   |
| BATA | 1979 | 7.07                | 5.68                  | 7.56                | 42.86               | 57.84              | 140.30              | 126.42              | 107.52               | 53.99                    | 83.33                 | 95.48                   | 59.49                   |
| BATA | 1980 | 18.93               | 9.46                  | 9.96                | 33.40               | 57.62              | 161.91              | 131.38              | 85.69                | 87.89                    | 87.91                 | 39.97                   | 13.44                   |
| BATA | 1981 | 10.09               | 12.58                 | 14.74               | 44.68               | 113.59             | 121.92              | 109.46              | 83.16                | 69.65                    | 73.38                 | 52.91                   | 26.35                   |
| BATA | 1982 | 14.56               | 11.50                 | 17.73               | 65.73               | 77.87              | 91.50               | 137.09              | 123.51               | 86.25                    | 65.41                 | 35.61                   | 18.69                   |
| BATA | 1983 | 14.09               | 15.13                 | 23.90               | 62.52               | 64.70              | 70.99               | 97.01               | 126.38               | 56.98                    | 53.83                 | 25.20                   | 18.58                   |
| BATA | 1984 | 7.70                | 11.04                 | 7.42                | 11.11               | 34.89              | 102.76              | 98.40               | 114.20               | 83.39                    | 36.17                 | 41.11                   | 16.07                   |
| BATA | 1985 | 8.45                | 4.99                  | 6.56                | 23.06               | 52.12              | 146.36              | 102.01              | 95.55                | 79.33                    | 55.45                 | 53.37                   | 42.99                   |
| BATA | 1986 | 10.31               | 14.89                 | 27.01               | 38.71               | 63.42              | 188.36              | 201.04              | 124.37               | 64.50                    | 111.69                | 60.51                   | 28.61                   |
| BATA | 1987 | 11.39               | 13.20                 | 12.88               | 25.21               | 70.39              | 101.23              | 147.91              | 133.24               | 64.13                    | 75.74                 | 43.83                   | 27.07                   |
| BATA | 1988 | 8.17                | 6.88                  | 4.57                | 18.27               | 32.04              | 86.95               | 142.12              | 59.08                | 51.40                    | 68.56                 | 90.95                   | 41.28                   |
| BATA | 1989 | 14.44               | 12.17                 | 35.88               | 25.87               | 91.82              | 100.18              | 144.45              | 67.23                | 46.67                    | 48.95                 | 44.56                   | 23.10                   |
| BATA | 1990 | 9.75                | 12.02                 | 19.87               | 30.14               | 117.17             | 113.16              | 130.97              | 104.74               | 45.59                    | 41.26                 | 41.25                   | 32.70                   |
| BATA | 1991 | 9.09                | 6.90                  | 19.15               | 26.52               | 45.82              | 69.15               | 191.11              | 165.69               | 93.65                    | 48.61                 | 54.15                   | 16.30                   |
| BATA | 1992 | 8.79                | 6.73                  | 5.98                | 15.78               | 30.21              | 62.84               | 152.68              | 147.07               | 56.35                    | 32.25                 | 37.64                   | 22.05                   |
| BATA | 1993 | 9.87                | 8.95                  | 14.81               | 36.59               | 73.42              | 128.49              | 129.93              | 100.86               | 65.20                    | 44.82                 | 53.09                   | 33.18                   |

|       |      |       |       |       |       |        |        |        |        |        |       |       |       |
|-------|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|
| BATA  | 1994 | 11.67 | 8.69  | 18.09 | 30.14 | 95.99  | 102.75 | 185.16 | 146.68 | 85.27  | 93.39 | 55.22 | 27.50 |
| BATA  | 1995 | 11.82 | 7.91  | 12.26 | 43.27 | 54.15  | 103.31 | 89.93  | 59.60  | 40.44  | 45.54 | 36.82 | 21.01 |
| BATA  | 1996 | 10.24 | 17.03 | 25.68 | 22.76 | 73.30  | 115.07 | 158.66 | 89.48  | 56.28  | 72.30 | 31.99 | 42.38 |
| BATA  | 1997 | 20.43 | 15.21 | 10.95 | 19.26 | 56.55  | 49.44  | 241.73 | 141.31 | 42.52  | 29.83 | 26.12 | 9.41  |
| BATA  | 1998 | 7.12  | 7.10  | 8.06  | 30.07 | 100.76 | 169.91 | 192.84 | 95.24  | 44.11  | 35.14 | 44.34 | 26.44 |
| BATA  | 1999 | 14.40 | 19.53 | 18.27 | 66.83 | 56.02  | 87.50  | 84.37  | 73.93  | 86.38  | 85.88 | 43.40 | 21.83 |
| BATA  | 2000 | 10.52 | 13.57 | 16.53 | 18.91 | 62.74  | 80.08  | 109.42 | 132.20 | 94.57  | 61.44 | 60.52 | 26.35 |
| BATA  | 2001 | 12.06 | 7.35  | 8.86  | 11.33 | 41.02  | 90.26  | 83.27  | 148.79 | 107.23 | 47.67 | 51.83 | 36.83 |
| BATA  | 2002 | 10.56 | 8.08  | 15.29 | 38.25 | 84.48  | 166.27 | 133.62 | 173.38 | 71.85  | 34.30 | 32.73 | 12.18 |
| BATA  | 2003 | 9.65  | 8.50  | 14.16 | 41.30 | 90.13  | 73.36  | 156.56 | 109.80 | 75.50  | 83.39 | 70.91 | 42.67 |
| BATA  | 2004 | 13.29 | 9.81  | 11.41 | 35.70 | 142.51 | 206.98 | 127.87 | 163.10 | 70.89  | 64.52 | 48.47 | 20.57 |
| BATA  | 2005 | 13.17 | 14.76 | 11.02 | 34.71 | 94.03  | 83.35  | 85.73  | 130.26 | 119.47 | 73.92 | 81.95 | 22.90 |
| BATA  | 2006 | 14.90 | 9.87  | 27.18 | 77.08 | 87.41  | 173.51 | 196.09 | 103.70 | 50.13  | 88.99 | 74.67 | 28.44 |
| BATA  | 2007 | 10.60 | 7.53  | 10.30 | 38.02 | 61.37  | 147.55 | 79.12  | 100.32 | 68.42  | 60.23 | 45.76 | 19.10 |
| BATA  | 2008 | 12.50 | 8.79  | 9.16  | 13.35 | 45.25  | 123.39 | 155.70 | 91.59  | 69.03  | 47.11 | 90.63 | 34.37 |
| NEGRO | 1963 | 0.61  | 1.02  | 0.71  | 5.30  | 8.47   | 9.69   | 9.08   | 10.00  | 6.63   | 3.26  | 3.47  | 2.04  |
| NEGRO | 1964 | 1.02  | 1.02  | 1.12  | 4.59  | 9.28   | 8.98   | 9.79   | 11.83  | 10.71  | 2.65  | 2.86  | 2.75  |
| NEGRO | 1965 | 2.86  | 2.35  | 0.82  | 2.75  | 11.32  | 8.67   | 15.91  | 11.83  | 5.30   | 3.26  | 5.71  | 1.84  |
| NEGRO | 1966 | 1.22  | 0.92  | 1.02  | 2.86  | 2.35   | 2.35   | 5.51   | 6.02   | 5.51   | 3.37  | 2.75  | 2.86  |
| NEGRO | 1967 | 2.65  | 1.43  | 1.73  | 5.10  | 6.63   | 12.75  | 15.71  | 16.42  | 8.67   | 3.57  | 2.86  | 2.75  |
| NEGRO | 1968 | 2.14  | 0.82  | 1.22  | 9.38  | 7.45   | 12.24  | 20.91  | 10.71  | 6.83   | 5.81  | 4.08  | 1.33  |
| NEGRO | 1969 | 1.12  | 1.22  | 1.02  | 4.08  | 8.36   | 9.08   | 12.55  | 10.10  | 5.92   | 5.41  | 4.59  | 3.16  |
| NEGRO | 1970 | 1.73  | 1.84  | 2.55  | 6.32  | 5.61   | 12.34  | 11.12  | 8.06   | 5.51   | 7.85  | 2.86  | 2.14  |
| NEGRO | 1971 | 1.43  | 1.53  | 2.65  | 4.28  | 6.94   | 10.61  | 13.36  | 9.18   | 6.83   | 3.86  | 3.76  | 1.78  |
| NEGRO | 1972 | 2.96  | 1.73  | 2.35  | 4.69  | 10.61  | 10.91  | 12.95  | 7.85   | 6.32   | 2.86  | 2.45  | 1.22  |
| NEGRO | 1973 | 0.71  | 0.61  | 2.55  | 1.84  | 5.92   | 8.26   | 8.67   | 7.75   | 6.12   | 4.28  | 3.67  | 1.63  |
| NEGRO | 1974 | 1.02  | 1.12  | 1.63  | 4.49  | 6.32   | 6.53   | 10.30  | 9.28   | 4.18   | 3.47  | 2.04  | 0.92  |
| NEGRO | 1975 | 0.82  | 0.61  | 1.94  | 2.75  | 4.90   | 15.91  | 7.75   | 8.16   | 3.88   | 3.61  | 2.95  | 1.81  |
| NEGRO | 1976 | 0.92  | 0.82  | 2.14  | 4.28  | 11.42  | 15.50  | 16.22  | 7.04   | 5.00   | 2.56  | 2.27  | 1.42  |
| NEGRO | 1977 | 0.51  | 0.71  | 1.02  | 1.94  | 3.98   | 9.38   | 13.26  | 5.30   | 6.76   | 3.84  | 2.46  | 1.04  |
| NEGRO | 1978 | 0.51  | 0.51  | 0.71  | 3.47  | 7.34   | 10.40  | 7.24   | 8.06   | 4.94   | 4.35  | 1.15  | 1.25  |
| NEGRO | 1979 | 0.41  | 0.31  | 0.41  | 3.26  | 3.98   | 6.53   | 7.65   | 8.06   | 2.63   | 3.78  | 4.82  | 3.53  |
| NEGRO | 1980 | 1.22  | 0.41  | 1.33  | 2.04  | 1.53   | 6.53   | 8.26   | 5.10   | 7.24   | 7.14  | 4.49  | 1.33  |
| NEGRO | 1981 | 0.61  | 1.12  | 1.63  | 4.08  | 5.92   | 8.47   | 7.96   | 8.36   | 5.81   | 5.81  | 3.77  | 2.35  |
| NEGRO | 1982 | 1.33  | 1.22  | 1.94  | 1.84  | 5.41   | 7.14   | 16.63  | 6.99   | 6.82   | 4.24  | 3.44  | 2.20  |
| NEGRO | 1983 | 1.22  | 2.75  | 3.67  | 6.02  | 5.00   | 7.24   | 10.81  | 10.20  | 6.73   | 6.83  | 3.04  | 2.80  |
| NEGRO | 1984 | 0.81  | 2.15  | 1.20  | 1.80  | 4.85   | 15.02  | 9.72   | 8.29   | 4.80   | 1.75  | 3.34  | 0.84  |
| NEGRO | 1985 | 0.59  | 0.50  | 0.53  | 1.52  | 7.76   | 10.38  | 7.46   | 5.60   | 5.91   | 3.11  | 1.89  | 0.67  |
| NEGRO | 1986 | 0.39  | 0.72  | 1.50  | 2.51  | 6.01   | 15.52  | 14.27  | 7.02   | 3.17   | 3.37  | 1.95  | 1.38  |
| NEGRO | 1987 | 1.19  | 3.69  | 2.52  | 4.61  | 6.58   | 8.47   | 11.90  | 7.41   | 4.55   | 3.67  | 2.06  | 1.64  |
| NEGRO | 1988 | 0.97  | 0.99  | 0.76  | 4.73  | 5.13   | 5.77   | 11.06  | 3.86   | 3.29   | 2.70  | 2.98  | 1.51  |
| NEGRO | 1989 | 1.68  | 1.49  | 3.29  | 4.03  | 9.86   | 10.92  | 12.42  | 5.36   | 4.03   | 4.30  | 3.62  | 1.83  |
| NEGRO | 1990 | 1.17  | 1.14  | 3.17  | 3.66  | 9.84   | 11.94  | 10.94  | 5.85   | 2.91   | 2.02  | 2.38  | 1.94  |
| NEGRO | 1991 | 0.93  | 1.00  | 1.41  | 2.36  | 5.18   | 8.89   | 16.34  | 13.27  | 9.54   | 4.67  | 3.04  | 1.57  |
| NEGRO | 1992 | 1.23  | 0.68  | 0.57  | 3.52  | 4.55   | 10.24  | 13.23  | 9.40   | 5.48   | 3.28  | 2.68  | 1.51  |

|       |      |      |      |      |      |       |       |       |       |      |      |      |      |
|-------|------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|
| NEGRO | 1993 | 1.30 | 0.63 | 3.25 | 4.47 | 6.42  | 10.94 | 14.86 | 8.27  | 5.70 | 4.00 | 3.74 | 2.92 |
| NEGRO | 1994 | 1.40 | 1.12 | 2.61 | 5.90 | 11.44 | 12.87 | 16.72 | 16.17 | 6.95 | 4.27 | 3.88 | 1.78 |
| NEGRO | 1995 | 2.63 | 2.28 | 2.45 | 4.06 | 5.18  | 7.84  | 5.62  | 3.77  | 3.46 | 3.23 | 1.86 | 1.07 |
| NEGRO | 1996 | 0.68 | 2.48 | 2.17 | 3.81 | 8.55  | 9.72  | 10.46 | 5.69  | 4.84 | 4.78 | 2.79 | 3.19 |
| NEGRO | 1997 | 1.21 | 2.17 | 1.51 | 5.44 | 10.39 | 7.85  | 20.51 | 16.20 | 6.67 | 5.48 | 4.63 | 2.89 |
| NEGRO | 1998 | 2.48 | 1.96 | 1.31 | 3.21 | 7.76  | 10.39 | 11.31 | 4.43  | 2.29 | 2.90 | 2.51 | 1.95 |
| NEGRO | 1999 | 1.53 | 2.27 | 1.66 | 8.13 | 6.65  | 7.70  | 6.20  | 5.49  | 4.09 | 6.67 | 3.10 | 1.29 |
| NEGRO | 2000 | 0.94 | 1.26 | 1.10 | 2.21 | 8.35  | 7.64  | 7.65  | 7.52  | 4.11 | 3.94 | 4.12 | 2.37 |
| NEGRO | 2001 | 1.58 | 0.91 | 1.00 | 3.19 | 6.66  | 9.75  | 7.61  | 9.52  | 6.62 | 2.86 | 3.00 | 2.59 |
| NEGRO | 2002 | 0.86 | 0.72 | 2.01 | 5.21 | 8.88  | 10.72 | 12.35 | 10.39 | 4.48 | 1.55 | 2.55 | 1.01 |
| NEGRO | 2003 | 0.97 | 0.80 | 1.64 | 4.50 | 8.56  | 6.58  | 9.30  | 9.60  | 5.93 | 4.14 | 2.78 | 2.25 |
| NEGRO | 2004 | 0.88 | 0.78 | 3.31 | 5.93 | 12.83 | 17.23 | 10.14 | 11.20 | 3.30 | 2.88 | 1.99 | 1.26 |
| NEGRO | 2005 | 1.46 | 2.99 | 1.76 | 5.93 | 9.28  | 7.90  | 8.34  | 9.28  | 9.03 | 4.02 | 5.08 | 2.10 |
| NEGRO | 2006 | 1.12 | 0.78 | 5.01 | 8.23 | 7.32  | 12.36 | 12.90 | 9.08  | 3.80 | 4.66 | 3.78 | 2.67 |
| NEGRO | 2007 | 1.23 | 0.87 | 2.55 | 4.90 | 7.84  | 11.57 | 5.59  | 6.23  | 5.79 | 4.03 | 4.58 | 1.58 |
| NEGRO | 2008 | 1.18 | 1.03 | 0.94 | 1.50 | 4.75  | 12.84 | 13.82 | 7.52  | 6.39 | 4.27 | 6.59 | 2.18 |
| RUCIO | 1963 | 0.31 | 0.52 | 0.37 | 2.71 | 4.33  | 4.96  | 4.64  | 5.11  | 3.39 | 1.67 | 1.77 | 1.04 |
| RUCIO | 1964 | 0.52 | 0.52 | 0.57 | 2.35 | 4.75  | 4.59  | 5.01  | 6.05  | 5.48 | 1.36 | 1.46 | 1.41 |
| RUCIO | 1965 | 1.46 | 1.20 | 0.42 | 1.41 | 5.79  | 4.44  | 8.14  | 6.05  | 2.71 | 1.67 | 2.92 | 0.94 |
| RUCIO | 1966 | 0.63 | 0.47 | 0.52 | 1.46 | 1.20  | 1.20  | 2.82  | 3.08  | 2.82 | 1.72 | 1.41 | 1.46 |
| RUCIO | 1967 | 1.36 | 0.73 | 0.89 | 2.61 | 3.39  | 6.52  | 8.04  | 8.40  | 4.44 | 1.83 | 1.46 | 1.41 |
| RUCIO | 1968 | 1.10 | 0.42 | 0.63 | 4.80 | 3.81  | 6.26  | 10.70 | 5.48  | 3.50 | 2.97 | 2.09 | 0.68 |
| RUCIO | 1969 | 0.57 | 0.63 | 0.52 | 2.09 | 4.28  | 4.64  | 6.42  | 5.17  | 3.03 | 2.77 | 2.35 | 1.62 |
| RUCIO | 1970 | 0.89 | 0.94 | 1.30 | 3.24 | 2.87  | 6.31  | 5.69  | 4.12  | 2.82 | 4.02 | 1.46 | 1.10 |
| RUCIO | 1971 | 0.73 | 0.78 | 1.36 | 2.19 | 3.55  | 5.43  | 6.84  | 4.70  | 3.50 | 1.98 | 1.92 | 0.91 |
| RUCIO | 1972 | 1.51 | 0.89 | 1.20 | 2.40 | 5.43  | 5.58  | 6.63  | 4.02  | 3.24 | 1.46 | 1.25 | 0.63 |
| RUCIO | 1973 | 0.37 | 0.31 | 1.30 | 0.94 | 3.03  | 4.23  | 4.44  | 3.97  | 3.13 | 2.19 | 1.88 | 0.83 |
| RUCIO | 1974 | 0.52 | 0.57 | 0.83 | 2.30 | 3.24  | 3.34  | 5.27  | 4.75  | 2.14 | 1.77 | 1.04 | 0.47 |
| RUCIO | 1975 | 0.42 | 0.31 | 0.99 | 1.41 | 2.50  | 8.14  | 3.97  | 4.17  | 1.98 | 1.85 | 1.51 | 0.93 |
| RUCIO | 1976 | 0.47 | 0.42 | 1.10 | 2.19 | 5.84  | 7.93  | 8.30  | 3.60  | 2.56 | 1.31 | 1.16 | 0.73 |
| RUCIO | 1977 | 0.26 | 0.37 | 0.52 | 0.99 | 2.04  | 4.80  | 6.78  | 2.71  | 3.46 | 1.97 | 1.75 | 0.52 |
| RUCIO | 1978 | 0.32 | 0.32 | 0.48 | 2.41 | 4.30  | 6.10  | 4.13  | 6.18  | 3.28 | 3.63 | 1.15 | 0.86 |
| RUCIO | 1979 | 0.53 | 0.22 | 0.42 | 1.80 | 2.37  | 5.68  | 7.07  | 5.30  | 2.26 | 2.23 | 2.14 | 2.59 |
| RUCIO | 1980 | 1.13 | 0.52 | 1.44 | 2.88 | 3.50  | 4.53  | 3.71  | 3.71  | 2.68 | 2.37 | 1.13 | 0.62 |
| RUCIO | 1981 | 0.52 | 0.62 | 1.13 | 1.55 | 3.30  | 4.22  | 4.33  | 3.09  | 2.16 | 2.37 | 1.44 | 1.13 |
| RUCIO | 1982 | 0.52 | 0.41 | 0.62 | 2.68 | 1.55  | 1.96  | 5.97  | 5.46  | 2.68 | 1.34 | 0.72 | 0.62 |
| RUCIO | 1983 | 0.52 | 0.82 | 1.85 | 2.58 | 2.88  | 3.71  | 4.84  | 5.15  | 2.99 | 2.68 | 1.24 | 2.83 |
| RUCIO | 1984 | 0.33 | 1.72 | 0.70 | 0.77 | 1.50  | 5.02  | 3.17  | 3.38  | 2.59 | 1.17 | 1.15 | 0.79 |
| RUCIO | 1985 | 0.38 | 0.33 | 0.33 | 0.49 | 2.57  | 6.07  | 5.99  | 4.40  | 3.59 | 2.59 | 1.44 | 1.01 |
| RUCIO | 1986 | 1.74 | 1.87 | 2.40 | 4.16 | 5.53  | 7.81  | 7.42  | 6.05  | 3.27 | 3.36 | 1.93 | 1.78 |
| RUCIO | 1987 | 0.85 | 1.50 | 1.76 | 3.30 | 4.73  | 6.67  | 7.31  | 3.38  | 2.07 | 1.54 | 0.74 | 0.72 |
| RUCIO | 1988 | 0.50 | 0.50 | 0.39 | 2.42 | 2.62  | 2.95  | 5.66  | 1.97  | 1.68 | 1.38 | 1.52 | 0.77 |
| RUCIO | 1989 | 0.57 | 0.56 | 0.93 | 1.14 | 2.30  | 1.06  | 1.21  | 4.85  | 6.40 | 3.73 | 2.16 | 1.06 |
| RUCIO | 1990 | 0.60 | 0.59 | 1.62 | 1.87 | 5.03  | 6.11  | 5.60  | 2.99  | 1.49 | 1.04 | 1.22 | 0.99 |
| RUCIO | 1991 | 0.48 | 0.51 | 0.72 | 1.21 | 2.65  | 4.55  | 8.36  | 6.79  | 4.88 | 2.39 | 1.55 | 0.80 |

|         |      |      |      |      |       |       |       |       |       |       |       |       |       |
|---------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RUCIO   | 1992 | 1.03 | 0.92 | 0.91 | 1.86  | 1.76  | 3.57  | 5.34  | 5.60  | 3.40  | 2.64  | 1.97  | 1.52  |
| RUCIO   | 1993 | 1.61 | 1.40 | 2.15 | 3.09  | 3.52  | 3.11  | 2.79  | 3.70  | 4.14  | 2.90  | 2.47  | 2.77  |
| RUCIO   | 1994 | 0.72 | 0.57 | 1.34 | 3.02  | 5.85  | 6.58  | 8.55  | 8.27  | 3.55  | 2.18  | 1.98  | 0.91  |
| RUCIO   | 1995 | 1.35 | 1.17 | 1.25 | 2.08  | 5.98  | 1.34  | 2.18  | 2.14  | 0.61  | 2.00  | 2.73  | 1.71  |
| RUCIO   | 1996 | 0.14 | 0.35 | 0.48 | 0.96  | 6.97  | 6.86  | 7.53  | 2.97  | 2.25  | 3.29  | 2.70  | 1.51  |
| RUCIO   | 1997 | 1.05 | 1.48 | 1.34 | 3.20  | 2.34  | 5.43  | 6.64  | 5.54  | 1.79  | 1.97  | 1.17  | 0.69  |
| RUCIO   | 1998 | 0.52 | 0.68 | 0.84 | 2.27  | 3.94  | 3.36  | 5.40  | 3.18  | 1.80  | 1.55  | 0.85  | 0.50  |
| RUCIO   | 1999 | 0.59 | 0.86 | 0.85 | 5.91  | 2.90  | 3.69  | 2.83  | 3.07  | 2.02  | 4.55  | 3.32  | 0.84  |
| RUCIO   | 2000 | 0.48 | 0.64 | 0.56 | 1.13  | 4.27  | 3.91  | 3.92  | 3.85  | 2.10  | 2.02  | 2.11  | 1.21  |
| RUCIO   | 2001 | 0.81 | 0.47 | 0.51 | 1.63  | 3.41  | 4.99  | 3.90  | 4.87  | 3.39  | 1.47  | 1.54  | 1.33  |
| RUCIO   | 2002 | 0.44 | 0.37 | 1.03 | 2.67  | 4.55  | 5.49  | 6.32  | 5.32  | 2.29  | 0.79  | 1.30  | 0.52  |
| RUCIO   | 2003 | 0.50 | 0.41 | 0.84 | 2.30  | 4.38  | 3.37  | 4.76  | 4.91  | 3.04  | 2.12  | 1.42  | 1.15  |
| RUCIO   | 2004 | 0.45 | 0.40 | 1.70 | 3.04  | 6.57  | 8.82  | 5.19  | 5.74  | 1.69  | 1.48  | 1.02  | 0.65  |
| RUCIO   | 2005 | 0.75 | 1.53 | 0.90 | 3.03  | 4.75  | 4.04  | 4.27  | 4.75  | 4.62  | 2.06  | 2.60  | 1.07  |
| RUCIO   | 2006 | 0.57 | 0.40 | 2.57 | 4.21  | 3.75  | 6.33  | 6.61  | 4.65  | 1.95  | 2.39  | 1.93  | 1.37  |
| RUCIO   | 2007 | 0.63 | 0.45 | 1.30 | 2.51  | 4.02  | 5.92  | 2.86  | 3.19  | 2.96  | 2.06  | 2.34  | 0.81  |
| RUCIO   | 2008 | 0.60 | 0.53 | 0.48 | 0.77  | 2.43  | 6.57  | 7.08  | 3.85  | 3.27  | 2.19  | 3.37  | 1.11  |
| TUNJITA | 1977 |      |      |      |       |       |       | 18.89 | 19.31 | 20.06 | 11.99 | 10.10 | 1.33  |
| TUNJITA | 1978 | 0.75 | 0.73 | 3.19 | 18.33 | 18.82 | 21.66 | 14.27 | 31.59 | 14.59 | 13.45 | 7.93  | 3.44  |
| TUNJITA | 1979 | 0.94 | 0.52 | 0.88 | 8.66  | 12.71 | 50.18 | 28.03 | 19.65 | 9.30  | 17.21 | 14.31 | 8.86  |
| TUNJITA | 1980 | 1.71 | 0.88 | 2.01 | 9.28  | 17.22 | 29.37 | 29.21 | 24.32 | 14.50 | 10.78 | 4.69  | 2.06  |
| TUNJITA | 1981 | 1.17 | 2.44 | 3.00 | 10.98 | 12.92 | 18.22 | 22.76 | 12.43 | 12.66 | 12.17 | 8.20  | 3.37  |
| TUNJITA | 1982 | 2.71 | 2.09 | 3.88 | 14.39 | 18.19 | 20.90 | 18.98 | 24.28 | 12.62 | 12.55 | 5.49  | 2.50  |
| TUNJITA | 1983 | 1.72 | 3.85 | 7.21 | 20.88 | 12.34 | 10.72 | 21.67 | 31.85 | 12.31 | 11.01 | 8.66  | 5.50  |
| TUNJITA | 1984 | 1.40 | 7.13 | 1.16 | 2.08  | 6.86  | 15.92 | 27.39 | 25.56 | 10.64 | 5.87  | 8.67  | 2.39  |
| TUNJITA | 1985 | 0.83 | 0.51 | 0.94 | 5.14  | 13.10 | 31.10 | 19.80 | 20.60 | 15.50 | 10.70 | 11.40 | 4.80  |
| TUNJITA | 1986 | 1.00 | 3.90 | 5.50 | 10.10 | 13.50 | 35.08 | 29.76 | 15.08 | 10.80 | 15.60 | 6.94  | 4.85  |
| TUNJITA | 1987 | 0.99 | 2.06 | 5.24 | 10.20 | 21.16 | 19.19 | 21.28 | 33.13 | 12.46 | 9.98  | 5.26  | 4.34  |
| TUNJITA | 1988 | 3.57 | 3.53 | 2.95 | 6.11  | 10.46 | 21.62 | 27.60 | 15.63 | 12.58 | 13.10 | 13.48 | 6.69  |
| TUNJITA | 1989 | 2.54 | 1.74 | 5.70 | 4.68  | 17.46 | 15.48 | 19.30 | 12.87 | 11.34 | 17.23 | 17.81 | 5.56  |
| TUNJITA | 1990 | 2.53 | 3.39 | 5.78 | 9.18  | 24.62 | 19.24 | 23.02 | 23.41 | 14.95 | 18.88 | 16.17 | 10.47 |
| TUNJITA | 1991 | 2.13 | 1.72 | 3.37 | 10.18 | 13.95 | 15.66 | 31.16 | 22.86 | 17.70 | 11.24 | 10.47 | 2.37  |
| TUNJITA | 1992 | 2.35 | 2.66 | 2.35 | 6.02  | 10.40 | 18.14 | 39.91 | 23.94 | 12.20 | 10.37 | 11.54 | 7.07  |
| TUNJITA | 1993 | 5.38 | 4.82 | 7.13 | 11.93 | 19.92 | 28.03 | 26.12 | 20.56 | 18.68 | 10.29 | 12.15 | 5.81  |
| TUNJITA | 1994 | 3.58 | 3.49 | 7.23 | 10.18 | 22.66 | 18.88 | 27.64 | 30.19 | 29.14 | 13.62 | 13.45 | 7.55  |
| TUNJITA | 1995 | 2.88 | 2.08 | 4.67 | 17.18 | 13.52 | 22.61 | 19.61 | 15.53 | 9.79  | 10.17 | 7.70  | 6.50  |
| TUNJITA | 1996 | 0.87 | 4.43 | 7.25 | 5.28  | 26.98 | 23.72 | 23.90 | 16.90 | 26.27 | 13.15 | 6.04  | 5.94  |
| TUNJITA | 1997 | 2.25 | 2.91 | 1.93 | 7.66  | 31.44 | 11.31 | 27.85 | 15.73 | 7.07  | 5.03  | 15.10 | 1.54  |
| TUNJITA | 1998 | 0.75 | 0.98 | 3.37 | 19.70 | 22.02 | 30.88 | 22.88 | 13.40 | 9.06  | 10.57 | 6.52  | 4.72  |
| TUNJITA | 1999 | 1.96 | 4.00 | 4.06 | 12.07 | 10.05 | 13.91 | 15.76 | 12.50 | 11.59 | 11.22 | 9.83  | 3.86  |
| TUNJITA | 2000 | 0.87 | 1.99 | 1.98 | 3.32  | 15.35 | 17.03 | 31.53 | 20.46 | 14.37 | 12.14 | 8.67  | 2.77  |
| TUNJITA | 2001 | 1.18 | 0.56 | 1.13 | 3.49  | 12.78 | 24.53 | 17.56 | 25.65 | 13.26 | 9.64  | 10.46 | 8.27  |
| TUNJITA | 2002 | 1.50 | 1.23 | 2.09 | 7.00  | 14.49 | 27.01 | 16.15 | 19.02 | 10.50 | 7.80  | 5.30  | 1.78  |
| TUNJITA | 2003 | 0.26 | 0.06 | 2.12 | 7.11  | 14.45 | 16.76 | 26.83 | 23.22 | 14.03 | 14.43 | 11.39 | 5.83  |
| TUNJITA | 2004 | 1.60 | 1.51 | 2.28 | 6.67  | 22.30 | 40.97 | 17.49 | 23.13 | 10.82 | 9.17  | 8.41  | 3.22  |

|         |      |      |      |      |       |       |       |       |       |       |       |       |      |
|---------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| TUNJITA | 2005 | 1.97 | 2.26 | 1.05 | 6.74  | 17.34 | 20.16 | 21.32 | 21.55 | 20.27 | 14.67 | 17.92 | 3.99 |
| TUNJITA | 2006 | 3.07 | 2.06 | 9.68 | 13.44 | 20.14 | 31.43 | 23.93 | 15.70 | 8.86  | 15.17 | 10.53 | 3.71 |
| TUNJITA | 2007 | 1.79 | 1.01 | 2.94 | 9.08  | 17.56 | 20.74 | 15.38 | 23.22 | 16.61 | 14.91 | 13.27 | 4.16 |
| TUNJITA | 2008 | 1.93 | 1.67 | 1.83 | 3.55  | 13.38 | 23.29 | 23.94 | 12.28 | 10.58 | 7.79  | 13.85 | 2.65 |

#### Formato 5. Embalses

| Nombre    | Mínimo Técnico (Mm3) | Máximo Técnico (Mm3) |
|-----------|----------------------|----------------------|
| ESMERALDA | 26.04                | 608.38               |

#### Formato 6. Filtraciones

Formato No Registrado

#### Formato 7. Curvas de Operación Embalses

Formato No Registrado

#### Formato 8. Capacidad Arcos de Descarga

| Nombre                  | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) | Fecha Entrada | Fecha Salida |
|-------------------------|---------------------|---------------------|---------------|--------------|
| NEGRORUCIO_ESMERALDA(2) | 0.00                | 48.20               | 1997-04-01    | 2077-12-01   |
| NEGRO NEGRORUCIO(1)     | 0.00                | 30.00               | 1997-04-01    | 2077-12-01   |
| RUCIO NEGRORUCIO(4)     | 0.00                | 18.20               | 1999-12-01    | 2077-12-01   |
| TUNJITA ESMERALDA(3)    | 0.00                | 40.00               | 1994-11-01    | 2077-12-01   |

#### Formato 9. Arco de Bombeo

Formato No Registrado

#### Formato 10. Capacidad Máxima Arco Generación

| Nombre | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) |
|--------|---------------------|---------------------|
| CHIVOR | 0.00                | 143.41              |

#### Formato 11. Descarga Máxima Embalse Bogotá

Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor

| Túnel   | Capacidad (m3/s) |
|---------|------------------|
| Negro   | 30.00            |
| Rucio   | 18.20            |
| Tunjita | 40.00            |

**Formato 13.** Demanda Acueducto y Riego

Formato No Registrado

**Formato 14.** Suministro Gas Natural

Formato No Registrado

**Formato 15.** Transporte Gas Natural

Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

Formato No Registrado

**Formato 17.** Almacenamiento Combustible

Formato No Registrado

**Formato 18.** Energía Contratada

Formato No Registrado

**Formato 19.** Plantas Menores

Formato No Registrado

Central Hidroelectrica De Urra S.A.

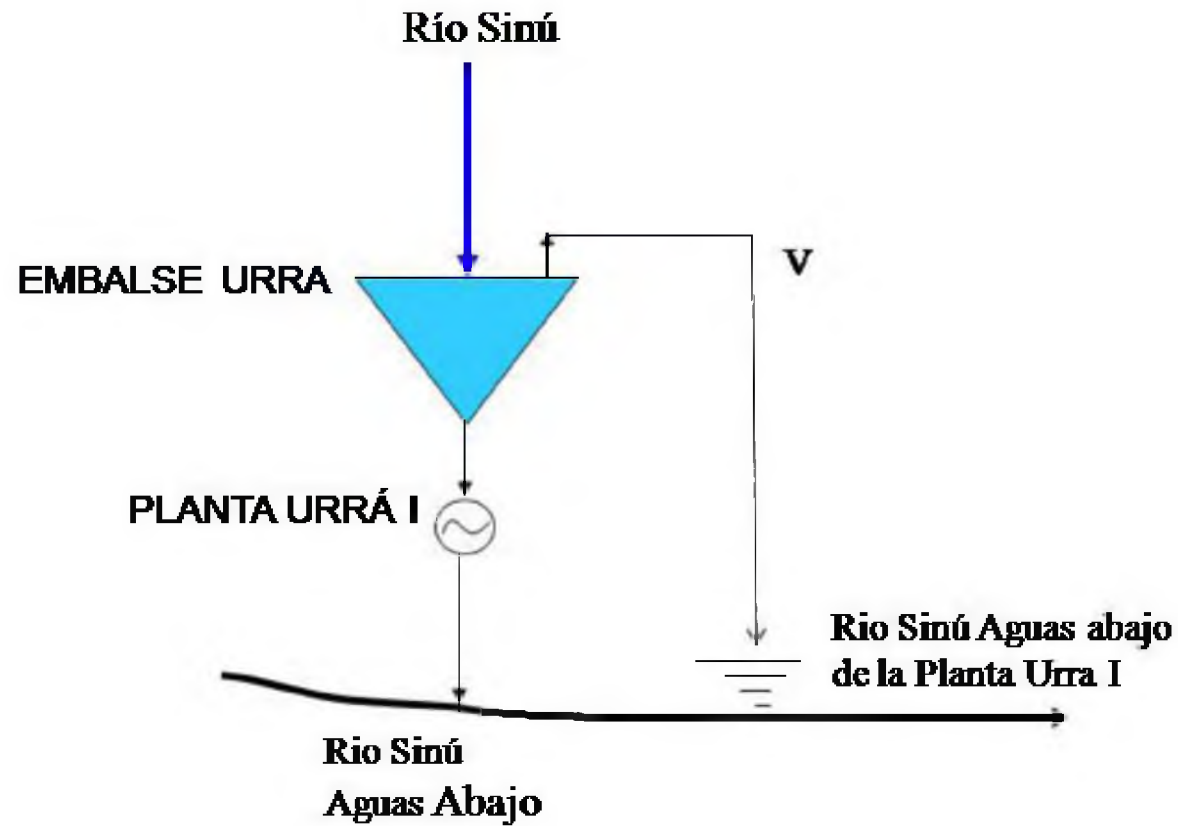
Formato 1. Plantas o Unidades Hidráulicas

| Nombre | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|--------|------------------------------|----------------------|---------|
| URRA I | 338.00                       | 0.4494               | 32.0335 |

Formato 2. Topología Plantas Hidráulicas

| Nombre Sistema | Elemento Clase | Elemento Nombre | Aportes Rio | Aportes Embalse | Aportes Planta | Aportes Otro | Descargas Rio           | Descargas Embalse | Descargas Planta | Descargas Otro | Vertimiento s Rio                                 | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro |
|----------------|----------------|-----------------|-------------|-----------------|----------------|--------------|-------------------------|-------------------|------------------|----------------|---------------------------------------------------|-----------------------|----------------------|--------------------|
| URRA           | E              | URRA            | SINU        |                 |                |              |                         |                   | URRA I           |                | RIO SINU<br>aguas abajo<br>de la planta<br>URRA I |                       |                      |                    |
| URRA           | P              | URRA I          |             | URRA            |                |              | RIO SINU<br>aguas abajo |                   |                  |                |                                                   |                       |                      |                    |

# TOPOLOGÍA URRÁ



**Formato 3. Plantas o Unidades Térmicas**  
**Formato No Registrado**

**Formato 4. Caudal Medio Mensual**

| Rio  | Año  | Caudal Enero (m3/s) | Caudal Febrero (m3/s) | Caudal Marzo (m3/s) | Caudal Abril (m3/s) | Caudal Mayo (m3/s) | Caudal Junio (m3/s) | Caudal Julio (m3/s) | Caudal Agosto (m3/s) | Caudal Septiembre (m3/s) | Caudal Octubre (m3/s) | Caudal Noviembre (m3/s) | Caudal Diciembre (m3/s) |
|------|------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| SINU | 1960 | 312.00              | 212.00                | 168.00              | 345.00              | 511.00             | 507.00              | 526.00              | 485.00               | 508.00                   | 552.00                | 367.00                  | 334.00                  |
| SINU | 1961 | 255.00              | 139.00                | 129.00              | 209.00              | 400.00             | 542.00              | 634.00              | 558.00               | 487.00                   | 480.00                | 459.00                  | 393.00                  |
| SINU | 1962 | 243.00              | 172.00                | 188.00              | 258.00              | 606.00             | 567.00              | 626.00              | 625.00               | 570.00                   | 549.00                | 491.00                  | 360.00                  |
| SINU | 1963 | 430.00              | 257.00                | 216.00              | 401.00              | 631.00             | 823.00              | 650.00              | 404.00               | 368.00                   | 260.00                | 264.00                  | 225.00                  |
| SINU | 1964 | 128.00              | 116.00                | 135.00              | 213.00              | 194.00             | 363.00              | 394.00              | 390.00               | 286.00                   | 350.00                | 313.00                  | 188.00                  |
| SINU | 1965 | 178.00              | 143.00                | 128.00              | 161.00              | 233.00             | 212.00              | 175.00              | 250.00               | 365.00                   | 375.00                | 290.00                  | 205.00                  |
| SINU | 1966 | 295.00              | 141.00                | 76.00               | 157.00              | 402.00             | 512.00              | 597.00              | 547.00               | 554.00                   | 525.00                | 419.00                  | 346.00                  |
| SINU | 1967 | 108.00              | 109.00                | 79.00               | 137.00              | 341.00             | 586.00              | 639.00              | 558.00               | 426.00                   | 364.00                | 335.00                  | 341.00                  |
| SINU | 1968 | 237.00              | 140.00                | 149.00              | 201.00              | 458.00             | 552.00              | 635.00              | 546.00               | 493.00                   | 610.00                | 433.00                  | 219.00                  |
| SINU | 1969 | 138.00              | 115.00                | 134.00              | 162.00              | 251.00             | 499.00              | 454.00              | 537.00               | 468.00                   | 379.00                | 337.00                  | 351.00                  |
| SINU | 1970 | 301.00              | 197.00                | 105.00              | 330.00              | 562.00             | 632.00              | 527.00              | 495.00               | 556.00                   | 520.00                | 454.00                  | 502.00                  |
| SINU | 1971 | 385.00              | 207.00                | 363.00              | 262.00              | 508.00             | 489.00              | 599.00              | 508.00               | 483.00                   | 524.00                | 453.00                  | 203.00                  |
| SINU | 1972 | 234.00              | 119.00                | 99.00               | 211.00              | 538.00             | 497.00              | 372.00              | 421.00               | 493.00                   | 494.00                | 384.00                  | 223.00                  |
| SINU | 1973 | 103.00              | 59.00                 | 116.00              | 91.00               | 229.00             | 367.00              | 513.00              | 453.00               | 432.00                   | 450.00                | 670.00                  | 327.00                  |
| SINU | 1974 | 241.00              | 116.00                | 109.00              | 257.00              | 523.00             | 487.00              | 369.00              | 427.00               | 454.00                   | 587.00                | 568.00                  | 186.00                  |
| SINU | 1975 | 85.00               | 65.00                 | 69.00               | 68.00               | 236.00             | 396.00              | 618.00              | 623.00               | 533.00                   | 622.00                | 602.00                  | 446.00                  |
| SINU | 1976 | 142.00              | 127.00                | 96.00               | 150.00              | 335.00             | 585.00              | 493.00              | 348.00               | 350.00                   | 451.00                | 399.00                  | 149.00                  |
| SINU | 1977 | 96.00               | 66.00                 | 82.00               | 144.00              | 391.00             | 520.00              | 494.00              | 519.00               | 390.00                   | 542.00                | 483.00                  | 298.00                  |
| SINU | 1978 | 109.00              | 116.00                | 149.00              | 387.00              | 518.00             | 633.00              | 393.00              | 478.00               | 397.00                   | 530.00                | 461.00                  | 301.00                  |
| SINU | 1979 | 101.00              | 73.00                 | 76.00               | 160.00              | 373.00             | 516.00              | 439.00              | 421.00               | 485.00                   | 459.00                | 358.00                  | 266.00                  |
| SINU | 1980 | 164.00              | 138.00                | 63.00               | 80.00               | 258.00             | 347.00              | 439.00              | 418.00               | 354.00                   | 561.00                | 373.00                  | 348.00                  |
| SINU | 1981 | 202.00              | 253.00                | 405.00              | 375.00              | 557.00             | 665.00              | 486.00              | 450.00               | 518.00                   | 448.00                | 428.00                  | 290.00                  |
| SINU | 1982 | 166.00              | 226.00                | 115.00              | 266.00              | 520.00             | 422.00              | 509.00              | 392.00               | 468.00                   | 449.00                | 334.00                  | 156.00                  |
| SINU | 1983 | 123.00              | 74.00                 | 97.00               | 230.00              | 388.00             | 495.00              | 433.00              | 419.00               | 460.00                   | 483.00                | 456.00                  | 310.00                  |
| SINU | 1984 | 205.00              | 169.00                | 142.00              | 126.00              | 295.00             | 403.00              | 534.00              | 537.00               | 488.00                   | 502.00                | 488.00                  | 285.00                  |
| SINU | 1985 | 106.00              | 80.00                 | 80.00               | 115.00              | 184.00             | 388.00              | 376.00              | 445.00               | 472.00                   | 523.00                | 402.00                  | 238.00                  |
| SINU | 1986 | 136.00              | 146.00                | 89.00               | 491.00              | 381.00             | 455.00              | 520.00              | 225.00               | 296.00                   | 379.00                | 328.00                  | 201.00                  |
| SINU | 1987 | 114.00              | 142.00                | 71.00               | 412.00              | 562.00             | 310.00              | 577.00              | 593.00               | 379.00                   | 583.00                | 401.00                  | 314.00                  |
| SINU | 1988 | 107.00              | 78.00                 | 53.00               | 239.00              | 366.00             | 380.00              | 613.00              | 812.00               | 390.00                   | 605.00                | 429.00                  | 295.00                  |
| SINU | 1989 | 229.00              | 120.00                | 174.00              | 162.00              | 436.00             | 493.00              | 497.00              | 449.00               | 397.00                   | 371.00                | 322.00                  | 252.00                  |
| SINU | 1990 | 146.00              | 93.00                 | 99.00               | 171.00              | 538.00             | 377.00              | 381.00              | 424.00               | 322.00                   | 388.00                | 481.00                  | 239.00                  |
| SINU | 1991 | 103.00              | 92.00                 | 112.00              | 100.00              | 305.00             | 472.00              | 396.00              | 365.00               | 390.00                   | 466.00                | 335.00                  | 224.00                  |
| SINU | 1992 | 105.00              | 57.00                 | 56.00               | 87.00               | 329.00             | 302.00              | 369.00              | 411.00               | 414.00                   | 412.00                | 334.00                  | 287.00                  |
| SINU | 1993 | 161.00              | 116.00                | 121.00              | 270.00              | 516.00             | 417.00              | 470.00              | 282.00               | 330.00                   | 364.00                | 404.00                  | 334.00                  |

|      |      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SINU | 1994 | 123.00 | 71.00  | 92.00  | 224.00 | 472.00 | 331.00 | 404.00 | 435.00 | 431.00 | 382.00 | 487.00 | 246.00 |
| SINU | 1995 | 98.00  | 59.00  | 57.00  | 167.00 | 366.00 | 516.00 | 546.00 | 410.00 | 432.00 | 440.00 | 362.00 | 367.00 |
| SINU | 1996 | 258.00 | 196.00 | 319.00 | 288.00 | 516.00 | 533.00 | 637.00 | 438.00 | 492.00 | 410.00 | 323.00 | 191.00 |
| SINU | 1997 | 113.00 | 215.00 | 105.00 | 151.00 | 320.00 | 389.00 | 400.00 | 337.00 | 300.00 | 368.00 | 355.00 | 192.00 |
| SINU | 1998 | 78.00  | 132.00 | 85.00  | 170.00 | 348.00 | 508.00 | 585.00 | 425.00 | 392.00 | 412.00 | 442.00 | 349.00 |
| SINU | 1999 | 185.00 | 267.00 | 237.00 | 469.00 | 516.00 | 472.00 | 488.00 | 547.00 | 505.00 | 530.00 | 352.00 | 389.00 |
| SINU | 2000 | 166.00 | 209.00 | 204.00 | 241.00 | 484.00 | 502.00 | 539.00 | 460.00 | 475.00 | 450.00 | 319.00 | 343.00 |
| SINU | 2001 | 187.61 | 72.25  | 162.63 | 157.39 | 469.74 | 457.95 | 376.94 | 338.70 | 357.39 | 447.84 | 505.20 | 342.01 |
| SINU | 2002 | 135.27 | 87.67  | 89.22  | 409.39 | 428.77 | 552.15 | 500.04 | 362.87 | 386.85 | 386.69 | 339.68 | 216.45 |
| SINU | 2003 | 106.57 | 64.55  | 51.91  | 230.22 | 498.77 | 464.39 | 600.34 | 384.43 | 532.83 | 475.63 | 460.95 | 369.39 |
| SINU | 2004 | 116.79 | 56.99  | 77.33  | 220.40 | 341.42 | 518.76 | 378.24 | 415.53 | 353.54 | 309.57 | 381.70 | 239.25 |
| SINU | 2005 | 174.11 | 161.56 | 104.48 | 259.14 | 398.01 | 513.94 | 418.88 | 402.70 | 428.39 | 496.91 | 416.83 | 235.87 |
| SINU | 2006 | 128.36 | 135.16 | 213.69 | 304.66 | 563.70 | 439.31 | 474.25 | 375.77 | 419.64 | 303.46 | 346.35 | 329.15 |
| SINU | 2007 | 147.02 | 61.03  | 128.15 | 438.80 | 586.30 | 655.91 | 601.03 | 521.75 | 465.93 | 424.15 | 409.02 | 210.55 |
| SINU | 2008 | 104.09 | 103.01 | 94.57  | 242.78 | 517.27 | 551.89 | 578.12 | 400.18 | 450.01 | 558.43 | 357.00 | 218.18 |

## Formato 5. Embalses

| Nombre | Mínimo Técnico (Mm3) | Máximo Técnico (Mm3) |
|--------|----------------------|----------------------|
| URRA   | 358.97               | 1,652.24             |

## Formato 6. Filtraciones

Formato No Registrado

## Formato 7. Curvas de Operación Embalses

| Embalse | Mes | Volumen Espera (Mm3) | Curva Guía Mínima (Mm3) | Curva Guía Máxima (Mm3) |
|---------|-----|----------------------|-------------------------|-------------------------|
| URRA    | 1   |                      | 1,186.00                | 1,632.00                |
| URRA    | 2   |                      | 735.00                  | 1,544.00                |
| URRA    | 3   |                      | 544.00                  | 1,553.00                |
| URRA    | 4   |                      | 421.00                  | 1,593.00                |
| URRA    | 5   |                      | 421.00                  | 1,113.00                |
| URRA    | 6   |                      | 579.00                  | 1,042.00                |
| URRA    | 7   |                      | 715.00                  | 1,123.00                |
| URRA    | 8   |                      | 888.00                  | 1,292.00                |
| URRA    | 9   |                      | 1,110.00                | 1,443.00                |
| URRA    | 10  |                      | 1,395.00                | 1,443.00                |
| URRA    | 11  |                      | 1,580.00                | 1,615.00                |
| URRA    | 12  |                      | 1,530.00                | 1,544.00                |

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación

| Nombre | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) |
|--------|---------------------|---------------------|
| URRA I | 75.00               | 700.00              |

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas  
Formato No Registrado

**Formato 17.** Almacenamiento Combustible  
Formato No Registrado

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores  
Formato No Registrado

Central Hidroeléctrica De Caldas S.A. E.S.P.

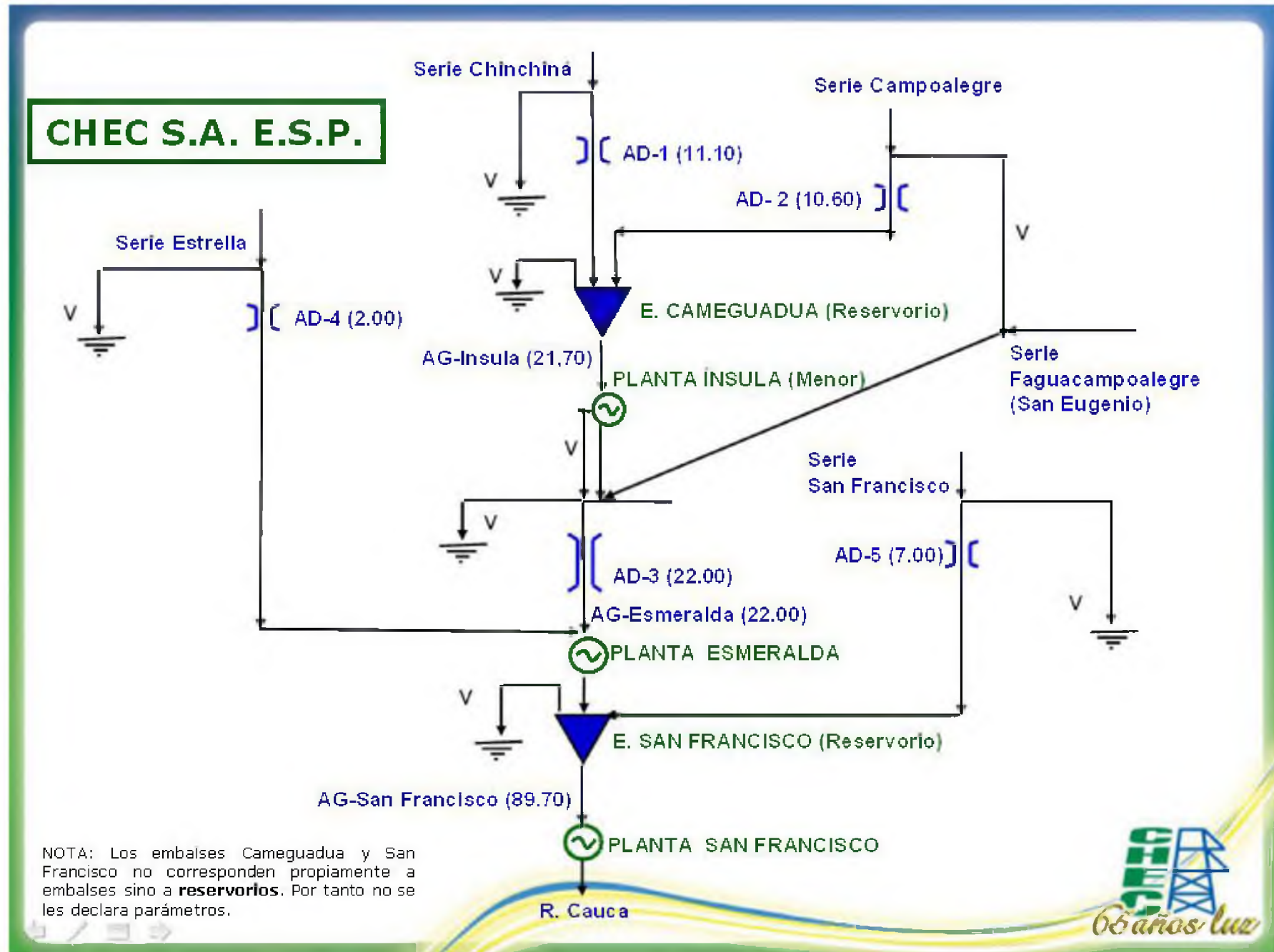
Formato 1. Plantas o Unidades Hidráulicas

| Nombre        | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|---------------|------------------------------|----------------------|---------|
| Esmeralda     | 30.00                        | 1.3721               | 11.7183 |
| San Francisco | 135.00                       | 1.5883               | 73.1859 |

Formato 2. Topología Plantas Hidráulicas

| Nombre Sistema | Elemento Clase | Elemento Nombre  | Aportes Rio                           | Aportes Embalse  | Aportes Planta | Aportes Otro                 | Descargas Rio | Descargas Embalse | Descargas Planta | Descargas Otro | Vertimiento s Rio                     | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro |
|----------------|----------------|------------------|---------------------------------------|------------------|----------------|------------------------------|---------------|-------------------|------------------|----------------|---------------------------------------|-----------------------|----------------------|--------------------|
| CHEC1          | AD             | AD-1             | Chinchina                             |                  |                |                              |               | Cameguadua        |                  |                |                                       |                       |                      | Tierra             |
| CHEC1          | AD             | AD-2             | Campoalegre                           |                  |                |                              |               | Cameguadua        |                  |                | Faguacampo<br>alegre (San<br>Eugenio) |                       |                      |                    |
| CHEC1          | AD             | AD-3             | Faguacampo<br>alegre (San<br>Eugenio) |                  | Insula         | Vertimiento<br>Planta Insula |               |                   | Esmeralda        |                |                                       |                       |                      | Tierra             |
| CHEC1          | AD             | AD-4             | Quebrada La<br>Estrella               |                  |                |                              |               |                   | Esmeralda        |                |                                       |                       |                      | Tierra             |
| CHEC1          | AD             | AD-5             | San<br>Francisco                      |                  |                |                              |               | San<br>Francisco  |                  |                |                                       |                       |                      | Tierra             |
| CHEC1          | E              | Cameguadua       |                                       |                  |                | AD-1 y AD-<br>2              |               |                   | Insula           |                |                                       |                       |                      | Tierra             |
| CHEC1          | E              | San<br>Francisco |                                       |                  | Esmeralda      | AD-5                         |               |                   | San<br>Francisco |                |                                       |                       |                      | Tierra             |
| CHEC1          | P              | Esmeralda        |                                       |                  |                | AD-3 y AD-<br>4              |               | San<br>Francisco  |                  |                |                                       |                       |                      |                    |
| CHEC1          | P              | Insula           |                                       | Cameguadua       |                |                              |               |                   |                  | AD-3           |                                       |                       |                      | AD-3               |
| CHEC1          | P              | San<br>Francisco |                                       | San<br>Francisco |                |                              | Cauca         |                   |                  |                |                                       |                       |                      |                    |

## Formato 2a. Diagramas Topología



### Formato 3. Plantas o Unidades Térmicas

| Nombre      | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|-------------|------------------------------|-----------------------|---------|
| Termodorada | 45.20                        | 9.9801                | 7.1192  |

### Formato 4. Caudal Medio Mensual

| Rio         | Año  | Caudal Enero (m3/s) | Caudal Febrero (m3/s) | Caudal Marzo (m3/s) | Caudal Abril (m3/s) | Caudal Mayo (m3/s) | Caudal Junio (m3/s) | Caudal Julio (m3/s) | Caudal Agosto (m3/s) | Caudal Septiembre (m3/s) | Caudal Octubre (m3/s) | Caudal Noviembre (m3/s) | Caudal Diciembre (m3/s) |
|-------------|------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| Campoalegre | 1979 |                     |                       |                     |                     |                    |                     |                     |                      | 10.66                    | 11.25                 | 11.45                   | 8.10                    |
| Campoalegre | 1980 | 7.12                | 8.39                  | 5.33                | 6.41                | 8.17               | 9.22                | 4.38                | 3.96                 | 4.87                     | 8.45                  | 7.01                    | 6.09                    |
| Campoalegre | 1981 | 3.53                | 4.39                  | 5.34                | 8.49                | 11.34              | 10.16               | 7.02                | 3.75                 | 4.69                     | 7.78                  | 9.29                    | 7.65                    |
| Campoalegre | 1982 | 10.29               | 8.57                  | 7.89                | 14.08               | 11.12              | 5.81                | 4.80                | 4.47                 | 3.60                     | 7.04                  | 9.35                    | 5.97                    |
| Campoalegre | 1983 | 3.81                | 3.16                  | 4.74                | 10.77               | 8.35               | 7.17                | 3.85                | 3.16                 | 3.15                     | 5.18                  | 5.70                    | 7.22                    |
| Campoalegre | 1984 | 7.13                | 7.21                  | 4.75                | 6.64                | 10.91              | 7.80                | 6.09                | 8.33                 | 7.39                     | 10.19                 | 10.76                   | 7.70                    |
| Campoalegre | 1985 | 7.56                | 5.21                  | 6.16                | 7.25                | 7.48               | 6.11                | 4.16                | 5.27                 | 5.31                     | 8.08                  | 8.05                    | 6.14                    |
| Campoalegre | 1986 | 6.53                | 7.92                  | 7.41                | 9.01                | 7.79               | 7.01                | 4.91                | 4.08                 | 4.65                     | 9.64                  | 7.67                    | 5.41                    |
| Campoalegre | 1987 | 4.60                | 4.10                  | 4.43                | 5.21                | 7.98               | 5.79                | 5.42                | 5.67                 | 5.53                     | 9.15                  | 7.97                    | 3.82                    |
| Campoalegre | 1988 | 3.27                | 4.17                  | 3.82                | 6.21                | 4.97               | 5.45                | 6.01                | 6.28                 | 8.37                     | 8.56                  | 10.85                   | 8.86                    |
| Campoalegre | 1989 | 7.30                | 6.16                  | 7.54                | 5.91                | 7.60               | 5.07                | 4.30                | 3.59                 | 4.56                     | 5.93                  | 7.61                    | 6.41                    |
| Campoalegre | 1990 | 5.06                | 5.66                  | 6.24                | 7.88                | 7.57               | 4.54                | 4.33                | 3.01                 | 2.62                     | 7.44                  | 6.52                    | 5.48                    |
| Campoalegre | 1991 | 5.21                | 3.46                  | 6.33                | 7.05                | 6.17               | 4.64                | 3.88                | 5.93                 | 3.78                     | 5.87                  | 7.25                    | 8.37                    |
| Campoalegre | 1992 | 4.26                | 3.94                  | 3.15                | 4.06                | 4.25               | 3.61                | 3.00                | 3.35                 | 4.27                     | 3.49                  | 5.93                    | 8.37                    |
| Campoalegre | 1993 | 5.08                | 3.76                  | 4.67                | 5.89                | 5.56               | 4.13                | 3.10                | 3.24                 | 5.35                     | 6.16                  | 9.32                    | 8.60                    |
| Campoalegre | 1994 | 4.56                | 4.89                  | 5.43                | 6.41                | 6.35               | 4.56                | 3.92                | 2.78                 | 3.83                     | 7.06                  | 7.23                    | 4.72                    |
| Campoalegre | 1995 | 2.68                | 2.63                  | 3.81                | 8.25                | 6.74               | 7.04                | 4.94                | 5.54                 | 4.37                     | 6.33                  | 5.95                    | 7.38                    |
| Campoalegre | 1996 | 6.10                | 8.24                  | 8.77                | 6.08                | 6.48               | 6.49                | 6.79                | 4.76                 | 4.58                     | 7.60                  | 7.12                    | 5.38                    |
| Campoalegre | 1997 | 6.58                | 5.69                  | 5.61                | 6.11                | 5.33               | 6.30                | 3.42                | 2.43                 | 3.32                     | 4.35                  | 7.39                    | 3.68                    |
| Campoalegre | 1998 | 2.67                | 3.16                  | 3.65                | 6.22                | 6.27               | 5.17                | 5.55                | 4.25                 | 7.85                     | 9.94                  | 10.69                   | 9.80                    |
| Campoalegre | 1999 | 7.45                | 9.44                  | 7.94                | 8.67                | 7.47               | 6.52                | 5.59                | 4.80                 | 8.33                     | 9.67                  | 10.38                   | 8.38                    |
| Campoalegre | 2000 | 7.01                | 8.37                  | 8.66                | 6.56                | 7.82               | 10.49               | 6.90                | 5.42                 | 9.48                     | 9.09                  | 9.50                    | 6.78                    |
| Campoalegre | 2001 | 5.00                | 4.74                  | 4.15                | 5.75                | 7.27               | 5.91                | 4.32                | 3.47                 | 4.44                     | 6.34                  | 7.54                    | 11.86                   |
| Campoalegre | 2002 | 5.68                | 3.95                  | 7.06                | 16.44               | 12.01              | 12.64               | 7.46                | 5.84                 | 6.58                     | 9.21                  | 10.85                   | 10.12                   |
| Campoalegre | 2003 | 4.35                | 6.16                  | 9.62                | 15.20               | 13.64              | 11.42               | 6.45                | 8.39                 | 8.12                     | 21.66                 | 13.80                   | 11.11                   |
| Campoalegre | 2004 | 17.46               | 5.30                  | 6.84                | 18.83               | 11.05              | 6.15                | 4.11                | 2.53                 | 4.52                     | 5.03                  | 8.24                    | 6.44                    |
| Campoalegre | 2005 | 4.99                | 6.08                  | 4.65                | 4.94                | 11.30              | 8.21                | 4.09                | 3.62                 | 3.43                     | 8.67                  | 10.85                   | 6.80                    |
| Campoalegre | 2006 | 5.06                | 4.46                  | 6.93                | 10.19               | 10.68              | 8.61                | 3.98                | 3.23                 | 3.31                     | 5.27                  | 8.37                    | 9.61                    |
| Campoalegre | 2007 | 5.30                | 3.51                  | 4.48                | 6.61                | 9.43               | 6.17                | 4.24                | 6.05                 | 4.71                     | 14.08                 | 8.42                    | 11.38                   |
| Campoalegre | 2008 | 5.00                | 5.03                  | 6.15                | 6.27                | 11.18              | 7.07                | 7.72                | 7.50                 | 7.79                     | 7.07                  | 15.81                   | 9.65                    |
| Chinchina   | 1960 |                     |                       |                     | 14.18               | 17.16              | 15.24               | 14.97               | 10.27                | 9.65                     | 14.33                 | 20.91                   | 27.78                   |
| Chinchina   | 1961 | 12.95               | 11.61                 | 12.10               | 17.44               | 14.07              | 14.65               | 14.19               | 8.84                 | 9.88                     | 14.35                 | 30.37                   | 13.52                   |

|           |      |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Chinchina | 1962 | 10.83 | 9.67  | 11.24 | 14.21 | 20.02 | 17.00 | 11.26 | 9.70  | 10.20 | 21.43 | 20.28 | 22.37 |
| Chinchina | 1963 | 16.14 | 19.58 | 18.58 | 28.34 | 27.61 | 18.78 | 13.74 | 11.17 | 8.87  | 14.21 | 27.12 | 14.22 |
| Chinchina | 1964 | 9.81  | 9.39  | 8.51  | 14.29 | 13.38 | 21.22 | 15.53 | 13.26 | 12.58 | 21.33 | 19.23 | 18.14 |
| Chinchina | 1965 | 12.92 | 11.23 | 9.61  | 14.69 | 20.57 | 10.70 | 8.35  | 7.75  | 9.22  | 15.56 | 25.29 | 25.73 |
| Chinchina | 1966 | 13.74 | 12.76 | 11.50 | 19.49 | 24.66 | 27.51 | 17.00 | 17.82 | 14.84 | 21.17 | 31.35 | 33.32 |
| Chinchina | 1967 | 14.56 | 14.29 | 13.38 | 18.82 | 24.53 | 20.82 | 12.64 | 11.58 | 10.92 | 17.23 | 28.92 | 17.80 |
| Chinchina | 1968 | 12.69 | 14.19 | 11.49 | 18.80 | 18.69 | 19.42 | 13.92 | 9.32  | 15.31 | 18.99 | 22.95 | 19.20 |
| Chinchina | 1969 | 26.71 | 18.04 | 15.73 | 49.71 | 38.03 | 31.56 | 19.77 | 19.23 | 21.93 | 56.39 | 44.07 | 19.68 |
| Chinchina | 1970 | 18.07 | 18.30 | 15.29 | 25.97 | 34.50 | 20.51 | 15.54 | 14.95 | 16.10 | 33.67 | 23.44 | 16.95 |
| Chinchina | 1971 | 22.92 | 26.54 | 40.42 | 35.93 | 34.15 | 22.64 | 22.25 | 22.92 | 29.31 | 36.43 | 29.01 | 23.31 |
| Chinchina | 1972 | 17.40 | 17.39 | 17.30 | 28.38 | 33.34 | 10.41 | 11.30 | 10.66 | 10.27 | 10.96 | 34.58 | 29.67 |
| Chinchina | 1973 | 25.41 | 22.00 | 24.89 | 25.94 | 27.51 | 30.18 | 28.97 | 30.90 | 42.53 | 39.19 | 38.53 | 42.05 |
| Chinchina | 1974 | 39.08 | 43.26 | 44.76 | 19.35 | 23.24 | 18.01 | 14.68 | 14.07 | 17.13 | 20.18 | 28.42 | 15.63 |
| Chinchina | 1975 | 12.36 | 20.76 | 15.05 | 12.76 | 18.97 | 17.04 | 20.73 | 16.42 | 17.75 | 16.95 | 33.48 | 42.75 |
| Chinchina | 1976 | 31.18 | 83.97 | 33.71 | 89.03 | 83.98 | 65.27 | 13.25 | 11.80 | 13.34 | 17.81 | 27.40 | 12.48 |
| Chinchina | 1977 | 10.41 | 9.13  | 11.59 | 15.10 | 16.47 | 14.82 | 11.75 | 10.52 | 11.42 | 18.66 | 21.32 | 11.70 |
| Chinchina | 1978 | 10.84 | 10.06 | 12.64 | 27.43 | 19.46 | 17.84 | 11.25 | 9.33  | 10.25 | 14.15 | 24.25 | 22.79 |
| Chinchina | 1979 | 7.68  | 7.69  | 9.25  | 16.25 | 13.48 | 18.51 | 8.74  | 9.34  | 14.23 | 22.28 | 27.25 | 21.35 |
| Chinchina | 1980 | 17.17 | 18.38 | 25.19 | 12.96 | 15.91 | 17.65 | 11.02 | 9.30  | 10.44 | 15.97 | 13.60 | 16.10 |
| Chinchina | 1981 | 8.49  | 8.56  | 12.40 | 19.83 | 26.27 | 24.85 | 17.94 | 15.27 | 17.72 | 19.33 | 18.78 | 15.70 |
| Chinchina | 1982 | 19.61 | 18.02 | 18.85 | 28.43 | 33.28 | 21.46 | 15.78 | 10.73 | 12.39 | 18.24 | 22.45 | 18.96 |
| Chinchina | 1983 | 5.32  | 3.38  | 10.79 | 21.76 | 17.36 | 15.58 | 9.71  | 7.82  | 8.15  | 12.18 | 16.95 | 22.49 |
| Chinchina | 1984 | 21.80 | 14.34 | 11.37 | 14.50 | 26.55 | 21.59 | 13.98 | 15.58 | 19.93 | 26.10 | 37.04 | 18.58 |
| Chinchina | 1985 | 27.42 | 19.35 | 14.48 | 18.17 | 20.73 | 14.97 | 11.46 | 13.24 | 15.61 | 24.76 | 20.90 | 25.54 |
| Chinchina | 1986 | 18.16 | 14.00 | 11.34 | 14.91 | 18.93 | 14.06 | 11.47 | 15.42 | 13.99 | 23.71 | 20.28 | 20.35 |
| Chinchina | 1987 | 8.90  | 8.65  | 8.19  | 11.64 | 17.13 | 13.16 | 11.48 | 13.91 | 12.38 | 22.66 | 19.67 | 15.16 |
| Chinchina | 1988 | 10.91 | 10.50 | 10.93 | 13.34 | 13.19 | 16.62 | 17.80 | 15.94 | 22.09 | 23.85 | 27.89 | 22.87 |
| Chinchina | 1989 | 17.57 | 17.88 | 21.97 | 17.03 | 21.69 | 18.29 | 15.20 | 14.19 | 15.70 | 19.23 | 22.44 | 23.01 |
| Chinchina | 1990 | 19.67 | 22.44 | 22.48 | 27.09 | 25.77 | 20.86 | 21.79 | 16.58 | 16.47 | 28.23 | 21.32 | 20.30 |
| Chinchina | 1991 | 20.49 | 19.30 | 27.82 | 19.05 | 8.66  | 9.87  | 8.70  | 8.07  | 8.92  | 13.13 | 17.98 | 19.28 |
| Chinchina | 1992 | 11.15 | 11.22 | 13.95 | 12.42 | 13.61 | 11.90 | 11.39 | 10.13 | 7.24  | 12.95 | 18.72 | 19.92 |
| Chinchina | 1993 | 20.01 | 11.16 | 10.03 | 16.87 | 29.67 | 16.67 | 12.65 | 13.19 | 21.82 | 15.25 | 14.67 | 17.75 |
| Chinchina | 1994 | 12.02 | 13.08 | 15.15 | 25.59 | 29.23 | 16.30 | 12.91 | 9.62  | 11.77 | 32.79 | 10.63 | 10.68 |
| Chinchina | 1995 | 8.01  | 9.32  | 11.23 | 11.33 | 14.07 | 15.53 | 14.69 | 16.67 | 15.11 | 20.20 | 22.03 | 22.45 |
| Chinchina | 1996 | 15.05 | 14.85 | 25.33 | 18.09 | 17.75 | 20.93 | 17.69 | 14.13 | 13.70 | 20.93 | 17.45 | 13.14 |
| Chinchina | 1997 | 18.22 | 13.57 | 14.79 | 18.81 | 7.63  | 12.31 | 8.41  | 7.11  | 8.82  | 12.56 | 12.90 | 19.03 |
| Chinchina | 1998 | 7.90  | 9.84  | 10.92 | 19.49 | 24.22 | 15.91 | 14.01 | 12.76 | 13.55 | 18.04 | 26.51 | 20.70 |
| Chinchina | 1999 | 19.12 | 25.98 | 22.72 | 21.65 | 23.69 | 19.07 | 15.93 | 13.33 | 20.83 | 23.54 | 34.08 | 23.42 |
| Chinchina | 2000 | 22.20 | 15.72 | 42.50 | 22.49 | 19.69 | 24.13 | 29.96 | 31.69 | 21.39 | 25.31 | 27.70 | 33.44 |
| Chinchina | 2001 | 10.02 | 8.58  | 9.99  | 9.22  | 6.84  | 9.28  | 7.92  | 6.47  | 7.88  | 8.76  | 10.39 | 10.61 |
| Chinchina | 2002 | 8.70  | 7.53  | 7.99  | 11.48 | 10.95 | 10.55 | 9.76  | 7.37  | 7.93  | 8.97  | 9.90  | 9.08  |
| Chinchina | 2003 | 8.42  | 8.38  | 14.35 | 18.23 | 9.81  | 14.14 | 8.58  | 9.42  | 9.01  | 15.60 | 15.24 | 10.13 |
| Chinchina | 2004 | 27.10 | 20.67 | 14.24 | 14.40 | 16.22 | 12.92 | 9.42  | 7.20  | 9.51  | 11.95 | 19.52 | 13.49 |
| Chinchina | 2005 | 12.79 | 14.43 | 11.76 | 11.59 | 18.16 | 14.89 | 9.39  | 8.21  | 8.35  | 19.15 | 20.28 | 14.86 |
| Chinchina | 2006 | 13.51 | 9.70  | 13.40 | 14.46 | 19.69 | 18.07 | 11.43 | 10.34 | 8.20  | 12.56 | 16.79 | 14.74 |

|                                 |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Chinchina                       | 2007 | 12.01 | 8.65  | 10.91 | 15.18 | 23.66 | 17.11 | 10.94 | 11.54 | 10.71 | 32.15 | 29.30 | 30.56 |
| Chinchina                       | 2008 | 20.63 | 16.57 | 21.70 | 22.07 | 26.41 | 16.55 | 22.75 | 15.17 | 19.19 | 18.20 | 42.93 | 29.51 |
| Estrella                        | 1972 |       |       | 1.77  | 1.43  | 2.55  | 2.66  | 1.68  | 1.81  | 2.17  | 2.42  | 3.59  | 2.39  |
| Estrella                        | 1973 | 2.08  | 1.31  | 1.24  | 1.38  | 1.61  | 2.01  | 2.16  | 2.72  | 3.33  | 2.65  | 3.03  | 2.75  |
| Estrella                        | 1974 | 3.79  | 3.99  | 1.52  | 2.05  | 2.30  | 2.41  | 1.79  | 2.20  | 3.00  | 2.83  | 2.84  | 2.94  |
| Estrella                        | 1975 | 2.59  | 2.96  | 1.13  | 1.78  | 2.10  | 2.18  | 1.93  | 2.49  | 2.67  | 3.01  | 2.81  | 2.10  |
| Estrella                        | 1976 | 1.40  | 1.92  | 2.35  | 3.94  | 1.97  | 2.81  | 1.56  | 1.00  | 0.95  | 1.39  | 1.83  | 1.26  |
| Estrella                        | 1977 | 0.80  | 0.66  | 0.70  | 1.43  | 2.48  | 2.71  | 1.78  | 3.28  | 1.66  | 2.44  | 2.89  | 1.51  |
| Estrella                        | 1978 | 1.27  | 1.07  | 1.08  | 2.26  | 2.55  | 2.26  | 1.99  | 1.76  | 1.28  | 1.46  | 2.49  | 2.28  |
| Estrella                        | 1979 | 1.47  | 0.94  | 1.06  | 1.52  | 1.96  | 2.04  | 1.59  | 1.22  | 1.46  | 1.54  | 1.82  | 1.68  |
| Estrella                        | 1980 | 1.63  | 1.79  | 1.33  | 1.27  | 1.52  | 4.60  | 1.45  | 1.18  | 1.40  | 2.53  | 2.63  | 1.99  |
| Estrella                        | 1981 | 1.41  | 1.30  | 1.94  | 2.45  | 2.90  | 3.24  | 2.82  | 2.28  | 1.99  | 2.58  | 5.23  | 2.13  |
| Estrella                        | 1982 | 2.75  | 2.56  | 2.59  | 2.92  | 3.00  | 2.53  | 1.39  | 1.05  | 0.91  | 2.22  | 2.74  | 2.12  |
| Estrella                        | 1983 | 1.52  | 1.34  | 1.51  | 2.46  | 2.69  | 2.68  | 1.79  | 1.39  | 1.62  | 1.78  | 1.99  | 2.26  |
| Estrella                        | 1984 | 2.64  | 2.71  | 2.20  | 2.53  | 2.67  | 2.47  | 2.31  | 2.55  | 2.31  | 2.61  | 2.61  | 2.14  |
| Estrella                        | 1985 | 2.17  | 1.91  | 1.82  | 1.89  | 2.09  | 2.05  | 1.90  | 1.83  | 1.97  | 2.06  | 2.31  | 1.97  |
| Estrella                        | 1986 | 1.42  | 1.50  | 1.70  | 1.99  | 2.23  | 2.17  | 1.99  | 2.18  | 1.72  | 2.27  | 2.32  | 2.04  |
| Estrella                        | 1987 | 1.58  | 1.07  | 1.02  | 1.11  | 1.93  | 1.84  | 1.65  | 2.08  | 1.68  | 2.36  | 2.38  | 2.05  |
| Estrella                        | 1988 | 1.51  | 1.50  | 1.17  | 2.10  | 2.17  | 2.19  | 2.28  | 2.08  | 2.32  | 2.25  | 2.15  | 2.34  |
| Estrella                        | 1989 | 2.24  | 2.05  | 2.36  | 2.20  | 2.37  | 2.35  | 2.15  | 1.74  | 2.07  | 2.28  | 2.25  | 2.12  |
| Estrella                        | 1990 | 1.92  | 1.63  | 1.80  | 2.32  | 1.79  | 2.30  | 2.27  | 1.66  | 1.43  | 2.27  | 2.43  | 1.79  |
| Estrella                        | 1991 | 1.80  | 1.33  | 1.78  | 1.94  | 2.22  | 2.23  | 2.64  | 3.55  | 3.46  | 3.22  | 3.34  | 2.39  |
| Estrella                        | 1992 | 1.74  | 2.01  | 1.68  | 1.89  | 1.75  | 1.76  | 1.37  | 1.41  | 1.96  | 2.01  | 2.07  | 2.62  |
| Estrella                        | 1993 | 2.10  | 1.92  | 2.15  | 2.32  | 5.05  | 2.31  | 2.21  | 1.87  | 2.31  | 2.53  | 2.66  | 2.74  |
| Estrella                        | 1994 | 2.41  | 1.89  | 2.43  | 2.54  | 2.38  | 1.99  | 1.94  | 1.55  | 1.58  | 2.28  | 2.56  | 2.37  |
| Estrella                        | 1995 | 1.45  | 1.16  | 1.05  | 2.04  | 2.43  | 2.58  | 2.44  | 2.21  | 1.96  | 2.57  | 2.38  | 6.06  |
| Estrella                        | 1996 | 2.57  | 3.38  | 6.29  | 4.21  | 3.50  | 4.42  | 5.89  | 1.94  | 1.71  | 2.20  | 2.97  | 1.96  |
| Estrella                        | 1997 | 2.10  | 2.23  | 2.16  | 1.95  | 1.84  | 2.49  | 1.22  | 0.71  | 0.67  | 0.84  | 1.81  | 1.04  |
| Estrella                        | 1998 | 0.77  | 0.61  | 0.67  | 1.62  | 1.62  | 2.29  | 3.23  | 2.33  | 2.33  | 2.07  | 2.72  | 2.19  |
| Estrella                        | 1999 | 1.50  | 1.65  | 1.66  | 1.51  | 1.60  | 1.43  | 1.40  | 1.13  | 1.42  | 1.58  | 1.53  | 1.57  |
| Estrella                        | 2000 | 1.19  | 1.23  | 1.49  | 1.56  | 1.50  | 1.61  | 1.50  | 1.32  | 1.43  | 1.42  | 0.96  | 0.91  |
| Estrella                        | 2001 | 1.50  | 1.21  | 1.93  | 1.61  | 2.65  | 2.50  | 1.36  | 1.27  | 1.32  | 1.57  | 2.03  | 2.58  |
| Estrella                        | 2002 | 1.49  | 0.97  | 1.13  | 1.39  | 1.78  | 1.75  | 1.51  | 0.90  | 1.13  | 1.40  | 2.18  | 1.90  |
| Estrella                        | 2003 | 1.00  | 1.31  | 1.35  | 2.19  | 2.40  | 2.33  | 1.46  | 4.94  | 0.99  | 2.20  | 2.40  | 1.27  |
| Estrella                        | 2004 | 1.20  | 0.95  | 0.86  | 1.60  | 2.34  | 1.22  | 1.19  | 0.85  | 1.52  | 1.44  | 2.27  | 2.11  |
| Estrella                        | 2005 | 1.94  | 2.06  | 2.18  | 2.16  | 4.18  | 5.45  | 1.58  | 1.12  | 1.12  | 1.83  | 3.14  | 2.09  |
| Estrella                        | 2006 | 1.88  | 1.65  | 1.95  | 3.73  | 5.57  | 3.35  | 1.38  | 1.07  | 1.28  | 2.03  | 2.58  | 2.72  |
| Estrella                        | 2007 | 1.38  | 0.91  | 1.24  | 1.96  | 2.05  | 1.85  | 1.46  | 2.97  | 2.74  | 3.43  | 2.59  | 2.74  |
| Estrella                        | 2008 | 1.88  | 1.84  | 2.06  | 2.57  | 3.89  | 3.64  | 3.76  | 2.56  | 2.53  | 2.19  | 4.33  | 3.21  |
| Faguacampoal egre (San Eugenio) | 1979 |       |       |       |       |       |       |       |       | 14.08 | 14.85 | 15.12 | 10.69 |
| Faguacampoal egre (San Eugenio) | 1980 | 9.40  | 11.08 | 7.05  | 8.46  | 10.79 | 12.18 | 5.78  | 5.23  | 6.43  | 11.16 | 9.25  | 8.05  |

|                                 |      |       |       |       |       |       |       |      |       |       |       |       |       |
|---------------------------------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Faguacampoal egre (San Eugenio) | 1981 | 4.67  | 5.80  | 7.05  | 11.21 | 14.97 | 13.42 | 9.28 | 4.95  | 6.20  | 10.27 | 12.27 | 10.10 |
| Faguacampoal egre (San Eugenio) | 1982 | 13.59 | 11.32 | 10.42 | 18.59 | 14.68 | 7.67  | 6.33 | 5.90  | 4.75  | 9.29  | 12.35 | 7.89  |
| Faguacampoal egre (San Eugenio) | 1983 | 5.04  | 4.18  | 6.26  | 14.23 | 11.03 | 9.47  | 5.08 | 4.17  | 4.15  | 6.84  | 7.52  | 9.54  |
| Faguacampoal egre (San Eugenio) | 1984 | 9.41  | 9.52  | 6.28  | 8.77  | 14.41 | 10.29 | 8.04 | 11.01 | 9.76  | 13.46 | 14.21 | 10.17 |
| Faguacampoal egre (San Eugenio) | 1985 | 9.98  | 6.88  | 8.13  | 9.57  | 9.87  | 8.07  | 5.49 | 6.96  | 7.02  | 10.67 | 10.63 | 8.11  |
| Faguacampoal egre (San Eugenio) | 1986 | 8.62  | 10.46 | 9.79  | 11.90 | 10.29 | 9.26  | 6.48 | 5.39  | 6.15  | 12.73 | 10.13 | 7.15  |
| Faguacampoal egre (San Eugenio) | 1987 | 6.07  | 5.42  | 5.85  | 6.88  | 10.54 | 7.64  | 7.16 | 7.49  | 7.30  | 12.08 | 10.53 | 5.04  |
| Faguacampoal egre (San Eugenio) | 1988 | 4.32  | 5.50  | 5.05  | 8.20  | 6.57  | 7.20  | 7.94 | 8.30  | 11.05 | 11.31 | 14.33 | 11.70 |
| Faguacampoal egre (San Eugenio) | 1989 | 9.64  | 8.14  | 9.96  | 7.80  | 10.03 | 6.70  | 5.68 | 4.74  | 6.03  | 7.83  | 10.05 | 8.47  |
| Faguacampoal egre (San Eugenio) | 1990 | 6.68  | 7.47  | 8.24  | 10.41 | 10.00 | 6.00  | 5.72 | 3.98  | 3.46  | 9.82  | 8.61  | 7.24  |
| Faguacampoal egre (San Eugenio) | 1991 | 6.89  | 4.57  | 8.36  | 9.31  | 8.15  | 6.12  | 5.12 | 7.83  | 4.99  | 7.75  | 9.58  | 11.06 |
| Faguacampoal egre (San Eugenio) | 1992 | 5.63  | 5.20  | 4.16  | 5.36  | 5.61  | 4.76  | 3.96 | 4.42  | 5.64  | 4.61  | 7.84  | 11.05 |
| Faguacampoal egre (San Eugenio) | 1993 | 6.71  | 4.97  | 6.17  | 7.77  | 7.34  | 5.45  | 4.09 | 4.28  | 7.07  | 8.13  | 12.31 | 11.36 |
| Faguacampoal egre (San Eugenio) | 1994 | 6.03  | 6.46  | 7.18  | 8.46  | 8.39  | 6.02  | 5.18 | 3.67  | 5.06  | 9.33  | 9.55  | 6.24  |
| Faguacampoal egre (San Eugenio) | 1995 | 3.54  | 3.47  | 5.03  | 10.89 | 8.90  | 9.30  | 6.52 | 7.32  | 5.76  | 8.36  | 7.86  | 9.75  |
| Faguacampoal egre (San Eugenio) | 1996 | 8.06  | 10.89 | 11.58 | 8.02  | 8.56  | 8.57  | 8.96 | 6.29  | 6.04  | 10.04 | 9.41  | 7.11  |
| Faguacampoal egre (San Eugenio) | 1997 | 8.69  | 7.51  | 7.41  | 8.07  | 7.04  | 8.32  | 4.52 | 3.21  | 4.38  | 5.74  | 9.76  | 4.87  |
| Faguacampoal egre (San Eugenio) | 1998 | 3.52  | 4.17  | 4.83  | 8.21  | 8.28  | 6.82  | 7.32 | 5.62  | 10.37 | 13.13 | 14.12 | 12.95 |
| Faguacampoal egre (San Eugenio) | 1999 | 9.84  | 12.47 | 10.49 | 11.45 | 9.86  | 8.61  | 7.38 | 6.34  | 11.00 | 12.77 | 13.70 | 11.06 |

|                                 |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Faguacampoal egre (San Eugenio) | 2000 | 9.25  | 11.05 | 11.43 | 8.66  | 10.32 | 13.85 | 9.12  | 7.16  | 12.52 | 12.00 | 12.54 | 8.95  |
| Faguacampoal egre (San Eugenio) | 2001 | 6.61  | 6.26  | 5.47  | 7.60  | 9.60  | 7.80  | 5.70  | 4.58  | 5.87  | 8.38  | 9.96  | 15.67 |
| Faguacampoal egre (San Eugenio) | 2002 | 7.50  | 5.21  | 9.32  | 21.72 | 15.87 | 16.69 | 9.85  | 7.71  | 8.68  | 12.17 | 14.32 | 13.36 |
| Faguacampoal egre (San Eugenio) | 2003 | 5.74  | 8.13  | 12.71 | 20.08 | 18.02 | 15.07 | 8.51  | 11.08 | 10.72 | 28.60 | 18.22 | 14.67 |
| Faguacampoal egre (San Eugenio) | 2004 | 23.06 | 7.01  | 9.04  | 36.62 | 18.08 | 8.12  | 5.42  | 2.58  | 5.96  | 5.09  | 10.88 | 8.08  |
| Faguacampoal egre (San Eugenio) | 2005 | 5.82  | 5.75  | 6.53  | 6.19  | 14.93 | 10.85 | 5.41  | 3.25  | 3.58  | 11.46 | 14.32 | 7.31  |
| Faguacampoal egre (San Eugenio) | 2006 | 6.68  | 5.88  | 7.32  | 13.46 | 14.10 | 11.37 | 4.43  | 4.27  | 4.38  | 6.95  | 11.05 | 12.70 |
| Faguacampoal egre (San Eugenio) | 2007 | 6.99  | 4.64  | 5.91  | 8.73  | 12.46 | 8.14  | 5.61  | 7.98  | 6.21  | 18.59 | 11.13 | 15.04 |
| Faguacampoal egre (San Eugenio) | 2008 | 6.61  | 6.64  | 8.12  | 8.27  | 14.77 | 9.34  | 10.20 | 9.90  | 10.28 | 9.34  | 20.88 | 12.75 |
| San Francisco                   | 1980 | 2.45  | 1.18  | 1.43  | 2.31  | 5.38  | 7.13  | 2.11  | 2.63  | 3.10  | 4.27  | 5.55  | 4.13  |
| San Francisco                   | 1981 | 2.58  | 2.23  | 2.67  | 3.83  | 4.99  | 5.07  | 3.37  | 1.86  | 3.06  | 2.79  | 3.36  | 3.31  |
| San Francisco                   | 1982 | 3.80  | 1.58  | 1.45  | 3.96  | 9.35  | 3.98  | 1.52  | 1.37  | 1.53  | 3.88  | 3.35  | 3.98  |
| San Francisco                   | 1983 | 2.53  | 2.20  | 2.35  | 9.30  | 6.74  | 2.69  | 1.90  | 1.70  | 1.99  | 2.70  | 2.63  | 4.50  |
| San Francisco                   | 1984 | 4.59  | 4.30  | 2.11  | 2.75  | 4.71  | 3.30  | 2.78  | 4.55  | 3.88  | 1.77  | 1.62  | 2.81  |
| San Francisco                   | 1985 | 1.85  | 1.70  | 2.21  | 2.89  | 4.69  | 3.48  | 1.70  | 1.92  | 1.83  | 2.14  | 2.23  | 3.56  |
| San Francisco                   | 1986 | 2.50  | 2.34  | 2.76  | 4.09  | 3.13  | 3.24  | 2.31  | 1.99  | 1.95  | 2.73  | 3.23  | 2.08  |
| San Francisco                   | 1987 | 2.39  | 1.82  | 1.74  | 1.90  | 4.04  | 2.44  | 3.08  | 4.34  | 2.54  | 4.13  | 3.69  | 1.87  |
| San Francisco                   | 1988 | 1.67  | 1.79  | 1.27  | 2.52  | 4.70  | 5.14  | 5.83  | 4.32  | 4.14  | 4.66  | 6.04  | 5.04  |
| San Francisco                   | 1989 | 5.72  | 4.72  | 4.76  | 3.33  | 3.73  | 4.27  | 2.53  | 2.20  | 2.52  | 3.17  | 3.04  | 2.68  |
| San Francisco                   | 1990 | 2.50  | 1.56  | 1.62  | 4.47  | 5.28  | 4.28  | 3.74  | 2.17  | 1.95  | 3.81  | 3.67  | 2.92  |
| San Francisco                   | 1991 | 2.93  | 2.29  | 2.73  | 2.72  | 5.14  | 4.96  | 2.98  | 2.26  | 2.99  | 2.53  | 3.25  | 3.01  |
| San Francisco                   | 1992 | 2.99  | 2.24  | 1.99  | 1.68  | 1.32  | 2.16  | 1.90  | 1.64  | 1.93  | 1.56  | 2.01  | 2.39  |
| San Francisco                   | 1993 | 1.41  | 1.01  | 1.81  | 2.11  | 4.55  | 3.57  | 3.79  | 2.58  | 2.04  | 3.38  | 3.73  | 2.80  |
| San Francisco                   | 1994 | 3.30  | 2.68  | 2.87  | 4.56  | 4.12  | 2.85  | 2.53  | 1.97  | 2.34  | 3.36  | 4.71  | 3.14  |
| San Francisco                   | 1995 | 1.79  | 1.67  | 1.79  | 4.33  | 8.25  | 5.99  | 5.57  | 5.40  | 7.52  | 5.33  | 5.81  | 6.80  |
| San Francisco                   | 1996 | 3.08  | 4.50  | 5.46  | 3.53  | 3.84  | 4.10  | 5.60  | 2.65  | 2.64  | 3.97  | 3.12  | 3.20  |
| San Francisco                   | 1997 | 3.19  | 3.99  | 3.05  | 3.33  | 2.97  | 4.09  | 2.13  | 1.33  | 1.34  | 1.35  | 3.71  | 2.25  |
| San Francisco                   | 1998 | 1.00  | 1.12  | 0.94  | 2.38  | 3.48  | 3.62  | 5.00  | 6.11  | 7.30  | 5.10  | 5.13  | 3.81  |
| San Francisco                   | 1999 | 3.16  | 4.69  | 4.47  | 4.67  | 3.93  | 2.69  | 2.25  | 1.98  | 4.39  | 5.26  | 5.36  | 6.26  |
| San Francisco                   | 2000 | 2.60  | 3.00  | 4.82  | 4.77  | 4.72  | 0.38  | 4.16  | 2.51  | 2.12  | 1.83  | 3.08  | 1.65  |
| San Francisco                   | 2001 | 3.21  | 2.53  | 4.50  | 4.70  | 5.53  | 4.74  | 3.22  | 2.82  | 3.12  | 3.30  | 3.73  | 5.56  |
| San Francisco                   | 2002 | 2.45  | 1.45  | 1.75  | 3.09  | 3.72  | 3.02  | 2.81  | 1.72  | 1.45  | 2.68  | 7.96  | 7.95  |
| San Francisco                   | 2003 | 3.61  | 3.59  | 2.84  | 4.19  | 5.95  | 4.68  | 2.48  | 2.11  | 1.58  | 4.27  | 4.21  | 1.75  |

|               |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| San Francisco | 2004 | 1.68 | 0.97 | 1.08 | 3.46 | 4.67 | 1.80 | 1.84 | 1.37 | 2.34 | 2.82 | 3.48 | 2.93 |
| San Francisco | 2005 | 3.57 | 2.56 | 3.67 | 3.42 | 5.43 | 6.53 | 3.41 | 2.45 | 2.15 | 3.86 | 6.44 | 3.92 |
| San Francisco | 2006 | 3.11 | 2.26 | 4.83 | 5.90 | 7.41 | 6.52 | 3.98 | 3.35 | 3.33 | 3.66 | 4.64 | 6.53 |
| San Francisco | 2007 | 3.40 | 1.99 | 2.82 | 5.15 | 4.22 | 3.49 | 3.09 | 4.53 | 4.96 | 5.01 | 4.81 | 5.21 |
| San Francisco | 2008 | 4.25 | 3.22 | 3.43 | 4.81 | 6.76 | 5.86 | 6.14 | 5.54 | 5.07 | 3.94 | 6.88 | 6.71 |

#### **Formato 5. Embalses**

Formato No Registrado

#### **Formato 6. Filtraciones**

Formato No Registrado

#### **Formato 7. Curvas de Operación Embalses**

Formato No Registrado

#### **Formato 8. Capacidad Arcos de Descarga**

| Nombre | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) | Fecha Entrada | Fecha Salida |
|--------|---------------------|---------------------|---------------|--------------|
| AD-1   | 0.00                | 11.10               | 1960-04-01    | 2100-12-01   |
| AD-2   | 0.00                | 10.60               | 1979-09-01    | 2100-12-01   |
| AD-3   | 0.00                | 22.00               | 1979-09-01    | 2100-12-01   |
| AD-4   | 0.00                | 2.00                | 1972-03-01    | 2100-12-01   |
| AD-5   | 0.00                | 7.00                | 1980-01-01    | 2100-12-01   |

#### **Formato 9. Arco de Bombeo**

Formato No Registrado

#### **Formato 10. Capacidad Máxima Arco Generación**

| Nombre           | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) |
|------------------|---------------------|---------------------|
| AG-Esmeralda     | 0.00                | 22.00               |
| AG-Insula        | 0.00                | 21.70               |
| AG-San Francisco | 0.00                | 89.70               |

#### **Formato 11. Descarga Máxima Embalse Bogotá**

Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

| Planta      | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| Termodorada | JET-A1      | 8,760.00        | 384,054.54               | 384,054.54           | 346,887.97             | 384,054.54           | 371,665.69           | 384,054.54          | 371,665.69           | 384,054.54           | 384,054.54            | 371,665.69                | 384,054.54             | 371,665.69               |

**Formato 17.** Almacenamiento Combustible  
Formato No Registrado

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores

| Nombre     | Capacidad Efectiva Neta (MW) | Disponibilidad (%) |
|------------|------------------------------|--------------------|
| Guacaica   | 0.86                         | 35.00              |
| Insula     | 19.00                        | 35.00              |
| Intermedia | 0.96                         | 35.00              |
| Municipal  | 1.40                         | 35.00              |
| Sancancio  | 2.00                         | 35.00              |



Compañía De Electricidad De Tulua S.A.

**Formato 1.** Plantas o Unidades Hidráulicas  
Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas  
Formato No Registrado

**Formato 2a.** Diagramas Topología

Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

Formato No Registrado

**Formato 4.** Caudal Medio Mensual

Formato No Registrado

**Formato 5.** Embalses

Formato No Registrado

**Formato 6.** Filtraciones

Formato No Registrado

**Formato 7.** Curvas de Operación Embalses

Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga

Formato No Registrado

**Formato 9.** Arco de Bombeo

Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación

Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá

Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor

Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas  
Formato No Registrado

**Formato 17.** Almacenamiento Combustible  
Formato No Registrado

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores

| Nombre      | Capacidad Efectiva Neta (MW) | Disponibilidad (%) |
|-------------|------------------------------|--------------------|
| Rio Frio I  | 1.69                         | 9.29               |
| Rio Frio II | 10.00                        | 15.08              |
| Rumor       | 2.50                         | 16.17              |

Emgesa S.A. E.S.P.

Formato 1. Plantas o Unidades Hidráulicas

| Nombre   | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|----------|------------------------------|----------------------|---------|
| Betania  | 540.00                       | 0.6381               | 7.8043  |
| Guavio   | 1,200.00                     | 9.8732               | 0.7923  |
| La Guaca | 324.00                       | 9.7974               | 0.7627  |
| Paraiso  | 276.00                       | 8.3430               | 0.6482  |

Formato 2. Topología Plantas Hidráulicas

| Nombre Sistema   | Elemento Clase | Elemento Nombre                       | Aportes Rio   | Aportes Embalse | Aportes Planta | Aportes Otro                | Descargas Rio | Descargas Embalse | Descargas Planta | Descargas Otro                        | Vertimiento s Rio | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro      |
|------------------|----------------|---------------------------------------|---------------|-----------------|----------------|-----------------------------|---------------|-------------------|------------------|---------------------------------------|-------------------|-----------------------|----------------------|-------------------------|
| Betania          | P              | Planta Betania                        |               |                 |                | Arco de Generacion Betania  |               |                   |                  | Tierra                                |                   |                       |                      |                         |
| Betania          | E              | Embalse Betania                       | Serie Betania |                 |                |                             |               |                   |                  | Arco de Generacion Betania            |                   |                       |                      | Tierra                  |
| Betania          | AG             | Arco de Generacion Betania            |               | Embalse Betania |                |                             |               |                   | Planta Betania   |                                       |                   |                       |                      |                         |
| Guavio           | P              | Planta Guavio                         |               |                 |                | Arco de Generacion Guavio   |               |                   |                  | Tierra                                |                   |                       |                      |                         |
| Guavio           | AG             | Arco de Generacion Guavio             |               | Embalse Guavio  |                |                             |               |                   | Planta Guavio    |                                       |                   |                       |                      |                         |
| Guavio           | E              | Embalse Guavio                        | Serie Guavio  |                 |                |                             |               |                   |                  | Arco de Generacion Guavio             |                   |                       |                      | Tierra                  |
| Paraiso La Guaca | P              | Planta La Guaca                       |               |                 |                | Arco de Generacion La Guaca |               |                   |                  | Tierra                                |                   |                       |                      |                         |
| Paraiso La Guaca | E              | Embalse Sisga                         | Serie Sisga   |                 |                |                             |               |                   |                  | Descarga Sisga                        |                   |                       |                      | Rio Bogota hasta Achury |
| Paraiso La Guaca | AD             | Descarga Sisga                        |               | Embalse Sisga   |                |                             |               |                   |                  | Rio Bogota hasta Achury               |                   |                       |                      |                         |
| Paraiso La Guaca | OU             | Demanda Riego Rio Bogota hasta Achury |               |                 |                | Rio Bogota hasta Achury     |               |                   |                  | Retorno Riego Rio Bogota hasta Achury |                   |                       |                      |                         |

|                  |    |                                       |                                       |                |  |                                                                                                                   |  |                |  |                                                                                          |  |  |  |                                     |
|------------------|----|---------------------------------------|---------------------------------------|----------------|--|-------------------------------------------------------------------------------------------------------------------|--|----------------|--|------------------------------------------------------------------------------------------|--|--|--|-------------------------------------|
| Paraiso La Guaca | OU | Retorno Riego Rio Bogota hasta Achury |                                       |                |  | Demanda Riego Rio Bogota hasta Achury                                                                             |  |                |  | Rio Bogota hasta Achury                                                                  |  |  |  |                                     |
| Paraiso La Guaca | E  | Embalse Tomine                        | Serie Tomine (Hidrologia Antigua)     |                |  | Bombeo Tomine                                                                                                     |  |                |  | Descarga Tomine                                                                          |  |  |  | Rio Bogota hasta Achury             |
| Paraiso La Guaca | AD | Descarga Tomine                       |                                       | Embalse Tomine |  |                                                                                                                   |  |                |  | Rio Bogota hasta Achury                                                                  |  |  |  |                                     |
| Paraiso La Guaca | B  | Bombeo Tomine                         |                                       |                |  | Rio Bogota hasta Achury                                                                                           |  | Embalse Tomine |  |                                                                                          |  |  |  |                                     |
| Paraiso La Guaca | N  | Rio Bogota hasta Achury               | Serie Baraya                          |                |  | Vertimiento Sisga + Descarga Sisga + Vertimiento Tomine + Descarga Tomine + Retorno Riego Rio Bogota hasta Achury |  |                |  | Rio Bogota entre Achury y Espino + Bombeo Tomine + Demanda Riego Rio Bogota hasta Achury |  |  |  | Rio Bogota entre Achury y Espino    |
| Paraiso La Guaca | E  | Embalse Neusa                         | Serie Neusa (Hidrologia Antigua)      |                |  |                                                                                                                   |  |                |  | Descarga Neusa                                                                           |  |  |  | Rio Bogota entre Achury y Espino    |
| Paraiso La Guaca | AD | Descarga Neusa                        |                                       | Embalse Neusa  |  |                                                                                                                   |  |                |  | Rio Bogota entre Achury y Espino                                                         |  |  |  |                                     |
| Paraiso La Guaca | N  | Rio Bogota entre Achury y Espino      | Serie Checua (Hidrologia Antigua)     |                |  | Rio Bogota hasta Achury + Vertimiento Neusa + Descarga Neusa + Vertimiento Rio Bogota hasta Achury                |  |                |  | Compuerta Espino                                                                         |  |  |  |                                     |
| Paraiso La Guaca | AD | Compuerta Espino                      |                                       |                |  | Rio Bogota entre Achury y Espino                                                                                  |  |                |  | Sistema Acueducto Bogota (SanRafaelSapoTibitoc)                                          |  |  |  | Rio Bogota entre Espino y Alicachin |
| Paraiso La Guaca | E  | Embalse Chuza                         | Serie Chuza (Hidrologia Antigua)      |                |  |                                                                                                                   |  |                |  | Descarga Chuza                                                                           |  |  |  | Tunel Chuza                         |
| Paraiso La Guaca | AD | Descarga Chuza                        |                                       | Embalse Chuza  |  |                                                                                                                   |  |                |  | Tunel Chuza                                                                              |  |  |  |                                     |
| Paraiso La Guaca | AD | Desviacion Rio Blanco                 | Serie Rio Blanco (Hidrologia Antigua) |                |  |                                                                                                                   |  |                |  | Tunel Chuza                                                                              |  |  |  | Tierra                              |
| Paraiso La Guaca | AD | Tunel Chuza                           |                                       |                |  | Vertimiento Chuza + Descarga Chuza + Desviacion Rio Blanco                                                        |  |                |  | Sistema Acueducto Bogota (SanRafaelSapoTibitoc)                                          |  |  |  |                                     |

|                  |    |                                                         |                                                   |              |                                             |                                                                                                                                                                                                                           |  |  |                 |                                                                                               |  |  |  |                                     |
|------------------|----|---------------------------------------------------------|---------------------------------------------------|--------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------|-----------------------------------------------------------------------------------------------|--|--|--|-------------------------------------|
| Paraiso La Guaca | AD | Sistema Acueducto Bogota (SanRafaelSapoTibitoc)         | Serie Teusaca (Hidrologia Antigua)                |              |                                             | Tunel Chuza + Compuerta Espino                                                                                                                                                                                            |  |  |                 | Rio Bogota entre Espino y Alicachin + Demanda Sistema Acueducto Bogota (SanRafaelSapoTibitoc) |  |  |  | Rio Bogota entre Espino y Alicachin |
| Paraiso La Guaca | OU | Demanda Sistema Acueducto Bogota (SanRafaelSapoTibitoc) |                                                   |              |                                             | Sistema Acueducto Bogota (SanRafaelSapoTibitoc)                                                                                                                                                                           |  |  |                 | Retorno Sistema Acueducto Bogota (SanRafaelSapoTibitoc)                                       |  |  |  |                                     |
| Paraiso La Guaca | AG | Arco de Generacion La Guaca                             |                                                   |              | Planta Paraiso + Vertimiento Planta Paraiso |                                                                                                                                                                                                                           |  |  | Planta La Guaca |                                                                                               |  |  |  |                                     |
| Paraiso La Guaca | P  | Planta Paraiso                                          |                                                   |              |                                             | Arco de Generacion Paraiso                                                                                                                                                                                                |  |  |                 | Arco de Generacion La Guaca                                                                   |  |  |  | Arco de Generacion La Guaca         |
| Paraiso La Guaca | AG | Arco de Generacion Paraiso                              |                                                   | Embalse Muna |                                             |                                                                                                                                                                                                                           |  |  | Planta Paraiso  |                                                                                               |  |  |  |                                     |
| Paraiso La Guaca | E  | Embalse Muna                                            |                                                   |              |                                             | Descarga Rio Bogota entre Espino y Alicachin a Embalse Muna                                                                                                                                                               |  |  |                 | Arco de Generacion Paraiso                                                                    |  |  |  | Rio Bogota entre Espino y Alicachin |
| Paraiso La Guaca | OU | Retorno Sistema Acueducto Bogota (SanRafaelSapoTibitoc) |                                                   |              |                                             | Demanda Sistema Acueducto Bogota (SanRafaelSapoTibitoc)                                                                                                                                                                   |  |  |                 | Rio Bogota entre Espino y Alicachin                                                           |  |  |  |                                     |
| Paraiso La Guaca | N  | Rio Bogota entre Espino y Alicachin                     | Serie Filo de Agua Alicachin (Hidrologia Antigua) |              |                                             | Vertimiento Compuerta Espino + Vertimiento Sistema Acueducto Bogota (SanRafaelSapoTibitoc) + Retorno Sistema Acueducto Bogota (SanRafaelSapoTibitoc) + Sistema Acueducto Bogota (SanRafaelSapoTibitoc) + Vertimiento Muna |  |  |                 | Descarga Rio Bogota entre Espino y Alicachin a Embalse Muna                                   |  |  |  | Tierra                              |

|                  |    |                                                             |  |  |  |                                     |  |              |  |  |  |  |  |  |
|------------------|----|-------------------------------------------------------------|--|--|--|-------------------------------------|--|--------------|--|--|--|--|--|--|
| Paraiso La Guaca | AD | Descarga Rio Bogota entre Espino y Alicachin a Embalse Muna |  |  |  | Rio Bogota entre Espino y Alicachin |  | Embalse Muna |  |  |  |  |  |  |
|------------------|----|-------------------------------------------------------------|--|--|--|-------------------------------------|--|--------------|--|--|--|--|--|--|

Formato 2a. Diagramas Topología

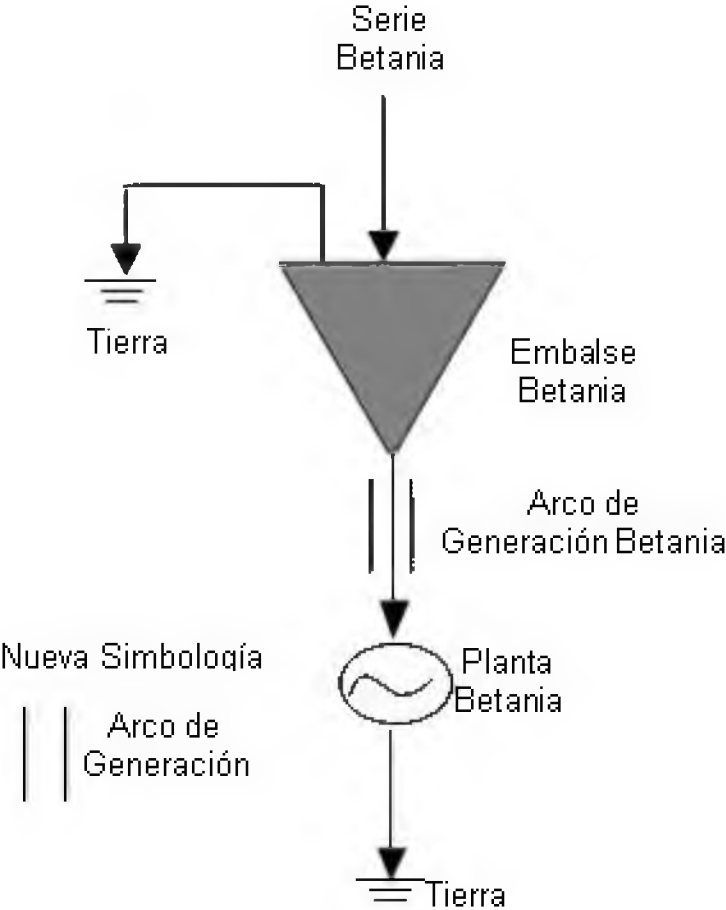
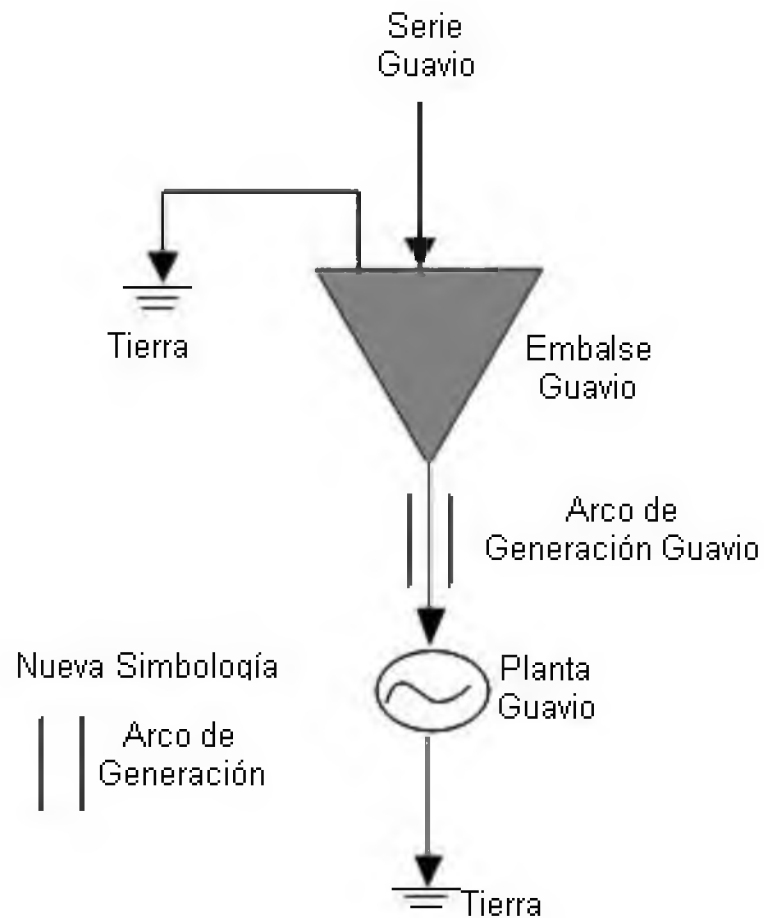


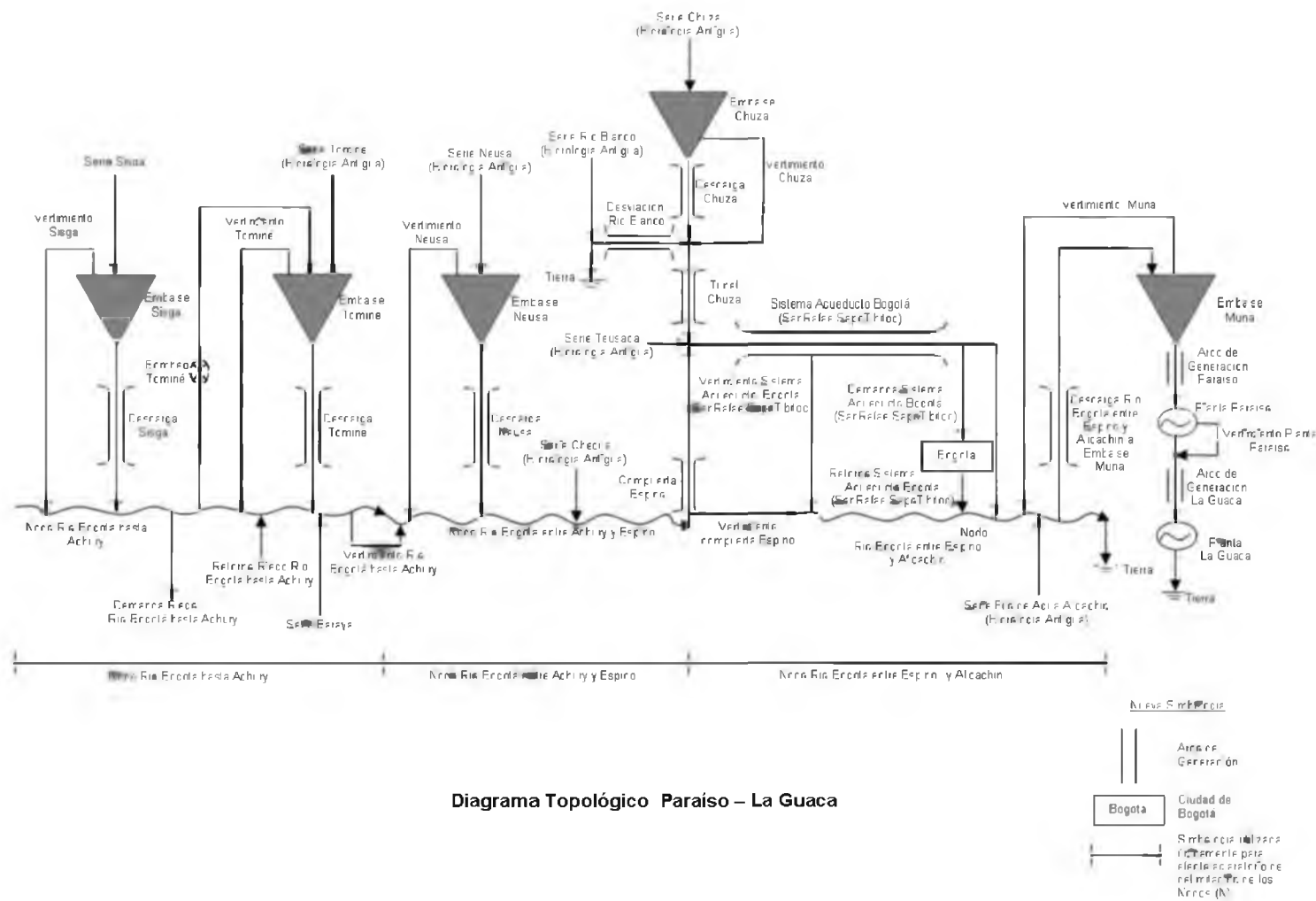
Diagrama Topológico Betania



**Diagrama Topológico Guavio**

**Formato 3. Plantas o Unidades Térmicas**

| Nombre      | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|-------------|------------------------------|-----------------------|---------|
| Cartagena 1 | 60.90                        | 11.1879               | 15.1000 |
| Cartagena 2 | 60.00                        | 11.0190               | 20.1000 |



|             |       |         |         |
|-------------|-------|---------|---------|
| Cartagena 3 | 65.89 | 10.9365 | 15.1000 |
| Termozipa 2 | 34.23 | 12.7586 | 8.5618  |
| Termozipa 3 | 62.73 | 9.6027  | 4.8157  |
| Termozipa 4 | 63.71 | 9.0118  | 8.6758  |
| Termozipa 5 | 63.43 | 8.6793  | 11.2486 |

#### Formato 4. Caudal Medio Mensual

| Rio          | Año  | Caudal Enero (m3/s) | Caudal Febrero (m3/s) | Caudal Marzo (m3/s) | Caudal Abril (m3/s) | Caudal Mayo (m3/s) | Caudal Junio (m3/s) | Caudal Julio (m3/s) | Caudal Agosto (m3/s) | Caudal Septiembre (m3/s) | Caudal Octubre (m3/s) | Caudal Noviembre (m3/s) | Caudal Diciembre (m3/s) |
|--------------|------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| Serie Baraya | 1944 | 0.65                | 0.39                  | 0.52                | 2.59                | 9.08               | 7.91                | 7.91                | 3.37                 | 2.21                     | 1.95                  | 2.08                    | 0.65                    |
| Serie Baraya | 1945 | 0.52                | 0.26                  | 0.26                | 2.59                | 8.95               | 4.28                | 5.45                | 5.45                 | 1.43                     | 1.56                  | 1.43                    | 0.65                    |
| Serie Baraya | 1946 | 0.65                | 0.26                  | 0.39                | 0.65                | 2.72               | 4.67                | 9.73                | 12.06                | 3.24                     | 1.04                  | 0.91                    | 0.78                    |
| Serie Baraya | 1947 | 0.26                | 0.39                  | 0.26                | 0.26                | 0.91               | 5.06                | 11.16               | 5.97                 | 2.98                     | 8.17                  | 1.82                    | 0.52                    |
| Serie Baraya | 1948 | 0.39                | 0.39                  | 0.26                | 1.30                | 2.59               | 4.41                | 5.97                | 3.24                 | 2.46                     | 1.17                  | 3.24                    | 0.91                    |
| Serie Baraya | 1949 | 0.39                | 0.39                  | 0.39                | 2.85                | 4.02               | 4.02                | 6.49                | 6.10                 | 2.72                     | 1.82                  | 3.37                    | 1.43                    |
| Serie Baraya | 1950 | 0.78                | 1.04                  | 2.46                | 0.78                | 5.32               | 5.32                | 6.10                | 4.15                 | 2.08                     | 2.98                  | 3.11                    | 2.34                    |
| Serie Baraya | 1951 | 1.04                | 1.17                  | 2.98                | 3.63                | 6.88               | 8.43                | 16.09               | 5.84                 | 2.85                     | 6.36                  | 5.58                    | 1.30                    |
| Serie Baraya | 1952 | 0.78                | 0.65                  | 0.52                | 3.89                | 4.15               | 6.23                | 11.03               | 7.14                 | 2.98                     | 2.21                  | 5.71                    | 2.34                    |
| Serie Baraya | 1953 | 0.78                | 0.78                  | 1.04                | 1.30                | 4.02               | 5.84                | 4.28                | 2.46                 | 2.21                     | 4.15                  | 3.89                    | 1.56                    |
| Serie Baraya | 1954 | 0.78                | 0.65                  | 0.52                | 1.82                | 3.89               | 6.62                | 8.17                | 6.10                 | 2.21                     | 6.75                  | 4.28                    | 1.82                    |
| Serie Baraya | 1955 | 1.32                | 0.87                  | 2.11                | 2.50                | 3.97               | 2.83                | 4.89                | 3.36                 | 3.24                     | 3.78                  | 3.98                    | 2.89                    |
| Serie Baraya | 1956 | 2.45                | 1.57                  | 2.98                | 1.62                | 2.14               | 6.68                | 6.02                | 8.16                 | 4.81                     | 9.02                  | 3.36                    | 2.15                    |
| Serie Baraya | 1957 | 0.70                | 0.45                  | 0.82                | 0.96                | 8.54               | 8.34                | 10.22               | 7.86                 | 3.59                     | 4.10                  | 3.63                    | 2.06                    |
| Serie Baraya | 1958 | 0.74                | 0.39                  | 0.54                | 0.92                | 2.22               | 3.55                | 8.78                | 5.97                 | 3.01                     | 1.31                  | 1.78                    | 0.75                    |
| Serie Baraya | 1959 | 0.40                | 0.45                  | 0.52                | 0.78                | 2.62               | 4.41                | 8.43                | 5.62                 | 5.20                     | 4.48                  | 3.81                    | 1.23                    |
| Serie Baraya | 1960 | 0.71                | 0.57                  | 0.45                | 0.82                | 1.70               | 2.92                | 5.70                | 10.04                | 5.89                     | 2.17                  | 1.61                    | 2.06                    |
| Serie Baraya | 1961 | 0.49                | 0.34                  | 0.43                | 0.86                | 0.57               | 5.93                | 5.75                | 5.92                 | 1.65                     | 2.70                  | 4.62                    | 0.87                    |
| Serie Baraya | 1962 | 0.42                | 0.35                  | 0.52                | 0.42                | 2.61               | 4.85                | 8.42                | 5.47                 | 2.54                     | 2.27                  | 2.52                    | 1.17                    |
| Serie Baraya | 1963 | 0.54                | 0.43                  | 0.38                | 1.06                | 9.04               | 6.49                | 7.93                | 8.13                 | 3.32                     | 1.04                  | 3.01                    | 1.02                    |
| Serie Baraya | 1964 | 0.39                | 0.32                  | 0.34                | 0.56                | 2.04               | 5.32                | 5.89                | 3.31                 | 3.32                     | 1.82                  | 2.59                    | 1.23                    |
| Serie Baraya | 1965 | 0.57                | 0.36                  | 0.43                | 2.40                | 6.97               | 6.47                | 13.27               | 9.41                 | 2.69                     | 4.37                  | 5.15                    | 1.80                    |
| Serie Baraya | 1966 | 0.77                | 0.40                  | 1.19                | 1.01                | 0.67               | 1.40                | 3.63                | 3.81                 | 1.86                     | 1.36                  | 2.21                    | 4.10                    |
| Serie Baraya | 1967 | 0.79                | 0.35                  | 0.53                | 2.52                | 5.51               | 10.69               | 9.22                | 15.11                | 4.26                     | 1.79                  | 2.93                    | 1.74                    |
| Serie Baraya | 1968 | 0.40                | 0.40                  | 0.30                | 3.52                | 1.63               | 7.25                | 15.07               | 9.90                 | 2.63                     | 2.87                  | 2.09                    | 0.79                    |
| Serie Baraya | 1969 | 1.12                | 0.62                  | 0.23                | 1.87                | 3.90               | 3.58                | 9.94                | 5.33                 | 1.58                     | 7.77                  | 4.03                    | 1.13                    |
| Serie Baraya | 1970 | 1.88                | 1.47                  | 0.77                | 1.31                | 3.31               | 6.06                | 5.90                | 5.93                 | 3.30                     | 7.17                  | 3.50                    | 1.56                    |
| Serie Baraya | 1971 | 1.21                | 0.79                  | 0.93                | 2.37                | 5.60               | 5.22                | 8.67                | 4.44                 | 3.18                     | 1.65                  | 2.01                    | 1.18                    |
| Serie Baraya | 1972 | 2.93                | 2.09                  | 1.91                | 7.34                | 7.06               | 8.81                | 12.99               | 5.31                 | 4.72                     | 1.39                  | 2.00                    | 0.84                    |
| Serie Baraya | 1973 | 0.64                | 0.48                  | 0.39                | 0.52                | 2.46               | 2.19                | 4.97                | 5.54                 | 7.65                     | 3.06                  | 4.13                    | 2.17                    |
| Serie Baraya | 1974 | 0.75                | 0.83                  | 0.91                | 2.05                | 2.21               | 2.46                | 5.22                | 3.78                 | 1.98                     | 2.17                  | 2.67                    | 1.10                    |
| Serie Baraya | 1975 | 0.58                | 0.65                  | 1.08                | 0.79                | 1.48               | 5.92                | 2.80                | 4.99                 | 2.87                     | 2.82                  | 3.42                    | 3.52                    |

|               |      |        |        |        |        |        |        |          |        |        |        |        |        |
|---------------|------|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|--------|
| Serie Baraya  | 1976 | 1.08   | 0.49   | 1.17   | 2.79   | 10.31  | 17.18  | 20.64    | 6.10   | 4.32   | 6.28   | 5.38   | 1.92   |
| Serie Baraya  | 1977 | 0.42   | 0.25   | 0.25   | 1.15   | 1.52   | 4.01   | 6.58     | 4.92   | 6.91   | 2.35   | 5.45   | 0.65   |
| Serie Baraya  | 1978 | 0.27   | 0.34   | 0.34   | 2.65   | 2.61   | 8.16   | 6.05     | 7.99   | 3.52   | 3.33   | 1.15   | 0.96   |
| Serie Baraya  | 1979 | 0.70   | 0.60   | 0.70   | 2.37   | 3.61   | 8.99   | 5.06     | 6.16   | 2.58   | 8.26   | 8.95   | 5.02   |
| Serie Baraya  | 1980 | 1.25   | 0.92   | 0.74   | 1.32   | 1.74   | 7.46   | 6.99     | 3.76   | 3.72   | 5.06   | 1.48   | 0.96   |
| Serie Baraya  | 1981 | 0.75   | 0.67   | 0.80   | 2.08   | 7.33   | 4.70   | 2.89     | 3.18   | 2.74   | 4.92   | 2.53   | 1.21   |
| Serie Baraya  | 1982 | 1.04   | 0.83   | 1.35   | 6.94   | 5.27   | 5.82   | 11.94    | 11.01  | 5.64   | 2.51   | 1.74   | 1.17   |
| Serie Baraya  | 1983 | 1.01   | 1.30   | 1.77   | 3.64   | 2.74   | 3.37   | 8.54     | 8.07   | 2.97   | 3.12   | 1.68   | 1.16   |
| Serie Baraya  | 1984 | 0.24   | 0.21   | 0.25   | 0.37   | 1.10   | 7.61   | 5.88     | 6.50   | 5.99   | 1.98   | 2.65   | 0.92   |
| Serie Baraya  | 1985 | 0.32   | 0.17   | 0.45   | 1.42   | 3.02   | 10.35  | 6.88     | 5.58   | 5.31   | 6.30   | 5.92   | 4.11   |
| Serie Baraya  | 1986 | 0.26   | 1.33   | 3.74   | 1.71   | 2.92   | 10.53  | 14.52    | 8.80   | 3.17   | 5.72   | 3.19   | 1.41   |
| Serie Baraya  | 1987 | 0.27   | 0.20   | 0.21   | 1.06   | 3.64   | 5.18   | 10.10    | 6.98   | 3.13   | 4.67   | 3.24   | 1.84   |
| Serie Baraya  | 1988 | 0.39   | 0.28   | 0.18   | 0.95   | 1.82   | 3.71   | 7.63     | 2.06   | 2.27   | 4.03   | 6.72   | 5.36   |
| Serie Baraya  | 1989 | 0.89   | 0.76   | 4.31   | 2.31   | 5.55   | 7.63   | 12.02    | 3.28   | 2.47   | 2.82   | 3.21   | 2.30   |
| Serie Baraya  | 1990 | 0.74   | 1.00   | 1.67   | 2.15   | 8.55   | 8.94   | 10.40    | 7.16   | 2.29   | 2.63   | 2.91   | 2.89   |
| Serie Baraya  | 1991 | 1.12   | 0.90   | 1.58   | 1.91   | 2.57   | 3.47   | 12.19    | 12.59  | 4.60   | 1.67   | 2.53   | 0.96   |
| Serie Baraya  | 1992 | 0.62   | 0.54   | 0.69   | 1.28   | 1.56   | 3.16   | 10.32    | 8.54   | 2.30   | 1.64   | 2.41   | 1.73   |
| Serie Baraya  | 1993 | 0.86   | 0.80   | 1.09   | 1.74   | 3.33   | 7.47   | 6.98     | 4.47   | 2.59   | 1.42   | 1.81   | 2.16   |
| Serie Baraya  | 1994 | 0.93   | 0.92   | 1.19   | 1.56   | 3.95   | 4.70   | 13.23    | 7.01   | 4.38   | 6.88   | 3.15   | 1.33   |
| Serie Baraya  | 1995 | 0.71   | 0.55   | 0.74   | 1.18   | 1.91   | 3.55   | 3.42     | 2.02   | 1.52   | 1.32   | 1.56   | 1.33   |
| Serie Baraya  | 1996 | 1.08   | 1.47   | 2.16   | 0.95   | 3.38   | 3.04   | 9.06     | 3.83   | 2.10   | 3.46   | 1.45   | 1.46   |
| Serie Baraya  | 1997 | 1.78   | 1.38   | 0.81   | 1.15   | 2.74   | 2.78   | 19.36    | 7.46   | 1.42   | 0.83   | 1.21   | 0.57   |
| Serie Baraya  | 1998 | 0.46   | 0.40   | 0.44   | 0.78   | 3.97   | 7.57   | 11.01    | 2.49   | 0.74   | 1.48   | 1.81   | 1.72   |
| Serie Baraya  | 1999 | 0.55   | 0.59   | 1.12   | 2.11   | 1.82   | 2.67   | 2.93     | 3.14   | 4.82   | 4.79   | 3.76   | 2.03   |
| Serie Baraya  | 2000 | 0.84   | 1.09   | 1.68   | 1.52   | 3.18   | 4.76   | 5.73     | 6.03   | 4.19   | 1.78   | 4.40   | 1.36   |
| Serie Baraya  | 2001 | 0.93   | 0.97   | 1.01   | 0.90   | 1.77   | 4.61   | 4.29     | 9.49   | 4.54   | 1.59   | 3.12   | 3.56   |
| Serie Baraya  | 2002 | 1.54   | 1.01   | 1.03   | 2.99   | 6.54   | 13.40  | 11.26    | 12.60  | 2.98   | 2.02   | 3.21   | 1.06   |
| Serie Baraya  | 2003 | 0.67   | 0.55   | 1.56   | 1.49   | 3.73   | 3.03   | 7.56     | 3.86   | 2.99   | 3.82   | 3.44   | 2.75   |
| Serie Baraya  | 2004 | 1.04   | 0.79   | 1.11   | 2.30   | 5.75   | 12.15  | 5.99     | 7.28   | 2.99   | 2.90   | 2.24   | 1.33   |
| Serie Baraya  | 2005 | 0.95   | 0.98   | 0.90   | 2.46   | 3.78   | 3.18   | 4.71     | 5.20   | 5.80   | 3.97   | 5.81   | 1.14   |
| Serie Baraya  | 2006 | 1.06   | 0.79   | 0.93   | 5.38   | 4.62   | 9.35   | 10.27    | 4.26   | 1.74   | 3.51   | 3.39   | 1.78   |
| Serie Baraya  | 2007 | 0.91   | 0.67   | 0.85   | 1.77   | 2.47   | 5.45   | 3.90     | 3.82   | 2.70   | 3.98   | 2.68   | 1.55   |
| Serie Baraya  | 2008 | 1.37   | 1.26   | 1.45   | 1.67   | 3.08   | 4.78   | 6.20     | 3.87   | 2.66   | 2.36   | 6.72   | 2.68   |
| Serie Betania | 1961 | 254.10 | 256.20 | 373.60 | 571.45 | 460.70 | 599.10 | 656.00   | 417.50 | 242.60 | 360.20 | 565.90 | 286.00 |
| Serie Betania | 1962 | 209.30 | 243.20 | 280.00 | 329.25 | 623.20 | 846.50 | 782.30   | 642.60 | 317.20 | 492.00 | 427.50 | 329.10 |
| Serie Betania | 1963 | 293.00 | 422.10 | 282.30 | 479.35 | 512.70 | 457.40 | 469.30   | 444.90 | 255.70 | 184.10 | 483.10 | 334.50 |
| Serie Betania | 1964 | 155.40 | 127.00 | 109.70 | 400.25 | 378.80 | 663.20 | 579.70   | 508.40 | 401.70 | 265.70 | 335.90 | 300.70 |
| Serie Betania | 1965 | 208.80 | 109.30 | 183.40 | 496.70 | 577.00 | 516.70 | 539.30   | 446.80 | 283.60 | 354.50 | 502.90 | 407.10 |
| Serie Betania | 1966 | 198.10 | 134.90 | 287.40 | 290.30 | 263.00 | 245.40 | 509.50   | 426.20 | 262.40 | 289.00 | 387.40 | 635.00 |
| Serie Betania | 1967 | 255.70 | 303.30 | 334.70 | 331.70 | 416.70 | 817.60 | 608.30   | 516.20 | 232.20 | 270.00 | 434.50 | 347.00 |
| Serie Betania | 1968 | 343.10 | 326.10 | 493.00 | 329.60 | 511.70 | 730.00 | 1,390.40 | 633.30 | 369.00 | 424.50 | 393.10 | 374.10 |
| Serie Betania | 1969 | 242.70 | 233.70 | 178.00 | 598.90 | 483.60 | 604.70 | 531.70   | 566.70 | 238.70 | 547.50 | 504.90 | 546.10 |
| Serie Betania | 1970 | 351.80 | 356.50 | 379.20 | 373.60 | 577.20 | 659.90 | 464.30   | 517.30 | 500.80 | 480.90 | 600.40 | 383.40 |
| Serie Betania | 1971 | 536.20 | 461.80 | 489.60 | 607.10 | 578.40 | 484.10 | 742.10   | 442.00 | 343.70 | 492.20 | 538.90 | 394.40 |
| Serie Betania | 1972 | 465.00 | 344.30 | 392.60 | 504.20 | 589.70 | 524.90 | 752.50   | 351.90 | 394.00 | 243.10 | 493.90 | 327.70 |

|                                         |      |        |        |        |        |        |          |          |        |        |        |        |        |
|-----------------------------------------|------|--------|--------|--------|--------|--------|----------|----------|--------|--------|--------|--------|--------|
| Serie Betania                           | 1973 | 160.60 | 171.50 | 198.80 | 247.10 | 361.10 | 374.60   | 508.40   | 519.50 | 509.10 | 392.30 | 494.40 | 561.90 |
| Serie Betania                           | 1974 | 381.10 | 662.40 | 580.30 | 530.40 | 502.80 | 495.40   | 669.70   | 512.90 | 423.30 | 474.60 | 637.40 | 398.60 |
| Serie Betania                           | 1975 | 263.60 | 349.70 | 463.40 | 351.30 | 555.50 | 703.70   | 546.60   | 576.90 | 477.40 | 490.50 | 662.50 | 642.70 |
| Serie Betania                           | 1976 | 343.10 | 416.20 | 596.40 | 713.00 | 793.80 | 752.40   | 998.15   | 662.20 | 521.70 | 476.00 | 476.00 | 376.20 |
| Serie Betania                           | 1977 | 182.60 | 217.35 | 239.60 | 410.30 | 495.00 | 542.90   | 527.00   | 415.20 | 536.00 | 526.30 | 556.00 | 275.20 |
| Serie Betania                           | 1978 | 210.90 | 199.50 | 254.60 | 579.80 | 406.80 | 516.80   | 478.25   | 465.40 | 334.10 | 347.50 | 265.80 | 324.30 |
| Serie Betania                           | 1979 | 179.00 | 160.30 | 412.10 | 538.80 | 495.10 | 659.00   | 519.15   | 369.80 | 366.50 | 344.50 | 559.30 | 349.20 |
| Serie Betania                           | 1980 | 283.60 | 337.30 | 324.40 | 529.20 | 484.50 | 652.90   | 530.00   | 394.70 | 330.20 | 462.10 | 291.60 | 300.80 |
| Serie Betania                           | 1981 | 215.70 | 298.40 | 322.00 | 451.70 | 726.70 | 514.40   | 587.20   | 347.90 | 345.30 | 346.10 | 545.60 | 346.00 |
| Serie Betania                           | 1982 | 602.45 | 474.40 | 500.30 | 597.10 | 624.40 | 495.40   | 727.20   | 552.20 | 473.40 | 457.70 | 383.20 | 464.50 |
| Serie Betania                           | 1983 | 325.00 | 296.40 | 389.00 | 646.85 | 595.20 | 381.30   | 424.80   | 572.10 | 309.60 | 373.90 | 330.30 | 420.00 |
| Serie Betania                           | 1984 | 524.05 | 466.40 | 297.90 | 456.45 | 510.00 | 565.10   | 610.25   | 488.80 | 400.00 | 566.50 | 635.80 | 508.60 |
| Serie Betania                           | 1985 | 308.85 | 209.70 | 207.20 | 314.40 | 447.80 | 730.70   | 666.40   | 600.10 | 377.00 | 362.50 | 374.40 | 297.90 |
| Serie Betania                           | 1986 | 287.05 | 410.40 | 572.60 | 484.50 | 405.80 | 748.90   | 1,018.90 | 448.50 | 417.70 | 803.40 | 555.50 | 276.30 |
| Serie Betania                           | 1987 | 206.60 | 223.90 | 226.20 | 467.00 | 517.60 | 456.60   | 525.60   | 611.50 | 321.80 | 448.90 | 317.50 | 290.40 |
| Serie Betania                           | 1988 | 152.90 | 213.00 | 171.70 | 293.10 | 355.00 | 630.10   | 782.80   | 362.80 | 307.70 | 348.60 | 633.10 | 470.80 |
| Serie Betania                           | 1989 | 360.00 | 343.80 | 570.60 | 357.70 | 618.00 | 620.20   | 679.80   | 404.50 | 346.00 | 448.00 | 447.20 | 263.30 |
| Serie Betania                           | 1990 | 269.00 | 315.80 | 347.80 | 419.80 | 669.80 | 688.70   | 647.20   | 525.20 | 333.20 | 339.20 | 332.90 | 369.30 |
| Serie Betania                           | 1991 | 196.70 | 189.50 | 294.10 | 341.90 | 390.00 | 453.90   | 771.00   | 710.00 | 516.10 | 304.70 | 412.70 | 348.10 |
| Serie Betania                           | 1992 | 216.40 | 204.00 | 184.40 | 330.20 | 251.00 | 376.30   | 648.30   | 539.50 | 254.30 | 222.69 | 288.40 | 301.50 |
| Serie Betania                           | 1993 | 197.80 | 237.60 | 444.50 | 469.20 | 503.30 | 651.60   | 574.40   | 452.30 | 329.10 | 290.70 | 548.80 | 472.80 |
| Serie Betania                           | 1994 | 326.10 | 336.10 | 484.50 | 714.30 | 750.20 | 854.50   | 701.70   | 621.80 | 437.20 | 408.60 | 435.40 | 365.70 |
| Serie Betania                           | 1995 | 189.20 | 148.10 | 283.00 | 476.90 | 441.30 | 446.60   | 482.00   | 265.20 | 248.90 | 320.86 | 350.95 | 253.43 |
| Serie Betania                           | 1996 | 265.72 | 455.53 | 529.85 | 398.48 | 482.19 | 503.05   | 723.32   | 403.25 | 302.28 | 478.05 | 300.94 | 350.24 |
| Serie Betania                           | 1997 | 442.46 | 348.85 | 285.34 | 328.72 | 636.80 | 375.40   | 840.94   | 451.63 | 230.03 | 205.32 | 256.41 | 172.36 |
| Serie Betania                           | 1998 | 98.23  | 162.43 | 171.37 | 346.37 | 392.86 | 709.90   | 599.31   | 356.16 | 256.75 | 315.81 | 393.11 | 295.47 |
| Serie Betania                           | 1999 | 488.22 | 640.60 | 388.31 | 696.96 | 528.37 | 504.25   | 418.50   | 412.48 | 372.45 | 335.71 | 365.10 | 559.01 |
| Serie Betania                           | 2000 | 347.47 | 442.80 | 500.51 | 433.59 | 847.78 | 503.57   | 399.20   | 547.45 | 371.14 | 339.95 | 368.28 | 285.28 |
| Serie Betania                           | 2001 | 213.30 | 205.97 | 332.38 | 351.00 | 418.87 | 644.37   | 450.65   | 534.20 | 357.23 | 235.34 | 325.31 | 379.06 |
| Serie Betania                           | 2002 | 181.96 | 146.80 | 311.16 | 415.69 | 520.66 | 750.19   | 580.18   | 579.22 | 299.63 | 306.94 | 330.94 | 288.68 |
| Serie Betania                           | 2003 | 152.76 | 182.10 | 251.30 | 321.57 | 499.07 | 389.27   | 484.14   | 331.38 | 285.37 | 367.39 | 344.98 | 328.74 |
| Serie Betania                           | 2004 | 253.27 | 161.79 | 211.16 | 417.74 | 418.34 | 661.13   | 463.32   | 521.52 | 307.39 | 326.59 | 400.54 | 346.68 |
| Serie Betania                           | 2005 | 237.91 | 373.43 | 306.49 | 518.61 | 426.10 | 499.71   | 441.25   | 452.04 | 347.62 | 385.10 | 430.01 | 460.63 |
| Serie Betania                           | 2006 | 395.63 | 311.38 | 543.64 | 563.58 | 423.82 | 684.94   | 619.28   | 385.75 | 294.19 | 312.02 | 529.69 | 486.62 |
| Serie Betania                           | 2007 | 218.49 | 159.64 | 312.59 | 504.41 | 563.85 | 1,001.52 | 445.62   | 440.46 | 301.54 | 526.08 | 529.73 | 508.39 |
| Serie Betania                           | 2008 | 337.48 | 429.73 | 441.08 | 438.09 | 548.77 | 649.19   | 775.60   | 409.71 | 363.62 | 400.38 | 554.30 | 557.17 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1965 | 0.64   | 0.59   | 0.35   | 4.09   | 6.16   | 2.14     | 0.00     | 1.04   | 4.28   | 5.20   | 9.33   | 3.02   |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1966 | 0.00   | 0.30   | 0.00   | 1.20   | 1.66   | 2.29     | 0.40     | 0.06   | 3.64   | 4.49   | 3.39   | 6.25   |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1967 | 0.65   | 0.94   | 0.00   | 1.59   | 3.54   | 2.60     | 0.39     | 0.02   | 1.23   | 2.12   | 7.00   | 1.62   |

|                                         |      |      |      |      |       |       |       |      |      |      |       |       |      |
|-----------------------------------------|------|------|------|------|-------|-------|-------|------|------|------|-------|-------|------|
| Serie Checua<br>(Hidrologia<br>Antigua) | 1968 | 0.00 | 0.00 | 0.00 | 2.88  | 2.88  | 4.20  | 0.79 | 0.69 | 0.00 | 2.11  | 4.84  | 2.10 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1969 | 0.00 | 0.19 | 0.00 | 2.54  | 3.23  | 2.19  | 0.83 | 0.66 | 0.83 | 5.68  | 4.56  | 1.35 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1970 | 0.17 | 0.46 | 0.08 | 2.08  | 2.74  | 1.68  | 0.47 | 0.68 | 1.74 | 4.81  | 5.88  | 1.33 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1971 | 0.00 | 0.28 | 0.00 | 4.06  | 4.13  | 1.47  | 0.16 | 0.00 | 1.55 | 1.95  | 3.79  | 1.18 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1972 | 1.86 | 0.81 | 0.00 | 2.63  | 6.12  | 3.94  | 0.16 | 0.91 | 0.61 | 1.95  | 3.52  | 1.18 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1973 | 0.00 | 0.00 | 0.00 | 0.71  | 1.73  | 1.71  | 0.59 | 0.57 | 2.53 | 3.12  | 4.40  | 2.31 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1974 | 0.05 | 1.48 | 0.83 | 3.18  | 4.36  | 1.95  | 0.79 | 0.49 | 2.65 | 3.86  | 6.16  | 1.67 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1975 | 0.00 | 1.27 | 1.08 | 3.50  | 3.60  | 2.18  | 1.21 | 0.99 | 2.49 | 3.47  | 5.46  | 4.67 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1976 | 0.09 | 0.00 | 0.04 | 3.29  | 3.29  | 2.56  | 2.22 | 0.55 | 2.02 | 3.74  | 5.29  | 2.08 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1977 | 0.36 | 0.28 | 0.06 | 2.75  | 2.78  | 2.86  | 1.16 | 1.92 | 3.25 | 4.43  | 7.41  | 1.62 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1978 | 0.77 | 0.31 | 1.36 | 4.86  | 4.36  | 6.00  | 3.39 | 3.05 | 3.77 | 4.64  | 4.77  | 2.46 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1979 | 0.06 | 0.68 | 3.24 | 5.90  | 9.67  | 11.19 | 7.34 | 7.27 | 6.75 | 15.57 | 17.06 | 5.26 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1980 | 1.53 | 1.37 | 0.87 | 2.91  | 3.66  | 4.17  | 3.40 | 2.71 | 2.19 | 6.30  | 3.44  | 1.13 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1981 | 0.19 | 0.26 | 0.57 | 4.18  | 11.46 | 10.73 | 7.78 | 3.94 | 3.85 | 6.86  | 8.44  | 2.01 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1982 | 2.45 | 2.17 | 3.15 | 10.18 | 9.74  | 3.95  | 3.86 | 1.82 | 2.72 | 6.21  | 4.67  | 3.21 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1983 | 0.66 | 0.10 | 0.74 | 3.92  | 0.65  | 0.52  | 1.15 | 2.14 | 0.00 | 0.65  | 1.35  | 0.13 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1984 | 0.00 | 0.66 | 0.41 | 1.62  | 2.80  | 5.42  | 3.23 | 4.56 | 7.68 | 3.12  | 4.31  | 1.70 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1985 | 1.07 | 0.00 | 0.00 | 0.39  | 3.20  | 4.90  | 3.50 | 2.99 | 3.93 | 3.71  | 9.99  | 4.67 |
| Serie Checua<br>(Hidrologia<br>Antigua) | 1986 | 1.22 | 9.91 | 8.58 | 0.00  | 6.11  | 6.17  | 2.88 | 0.00 | 8.12 | 12.36 | 0.98  | 0.00 |

|                                   |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Checua (Hidrologia Antigua) | 1987 | 0.00  | 1.42 | 2.56 | 5.36 | 2.55 | 0.65 | 1.06 | 0.00 | 0.00 | 1.60 | 1.35 | 2.46 |
| Serie Checua (Hidrologia Antigua) | 1988 | 10.05 | 3.96 | 5.19 | 6.88 | 0.00 | 0.00 | 0.00 | 0.66 | 3.95 | 5.58 | 5.41 | 2.47 |
| Serie Checua (Hidrologia Antigua) | 1989 | 0.00  | 0.54 | 1.74 | 0.59 | 3.21 | 1.26 | 1.25 | 0.06 | 0.69 | 1.69 | 1.44 | 1.48 |
| Serie Checua (Hidrologia Antigua) | 1990 | 0.00  | 0.04 | 0.00 | 0.00 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.07 | 0.07 |
| Serie Checua (Hidrologia Antigua) | 1991 | 0.00  | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 0.65 | 0.69 | 0.57 | 0.81 | 3.98 | 2.93 |
| Serie Checua (Hidrologia Antigua) | 1992 | 2.14  | 5.58 | 0.00 | 0.59 | 0.12 | 0.00 | 0.00 | 0.30 | 0.00 | 0.02 | 1.05 | 1.47 |
| Serie Checua (Hidrologia Antigua) | 1993 | 0.31  | 0.00 | 0.00 | 0.16 | 1.56 | 0.00 | 0.00 | 0.94 | 0.00 | 0.00 | 0.10 | 0.00 |
| Serie Checua (Hidrologia Antigua) | 1994 | 0.00  | 0.00 | 0.06 | 0.25 | 1.11 | 0.07 | 0.00 | 0.00 | 0.06 | 2.02 | 1.79 | 0.21 |
| Serie Checua (Hidrologia Antigua) | 1995 | 0.00  | 0.00 | 0.45 | 0.56 | 0.15 | 0.40 | 0.31 | 1.66 | 0.32 | 0.56 | 0.36 | 1.52 |
| Serie Checua (Hidrologia Antigua) | 1996 | 0.01  | 1.08 | 2.52 | 1.35 | 2.03 | 2.04 | 1.90 | 0.00 | 0.00 | 2.47 | 0.00 | 0.00 |
| Serie Checua (Hidrologia Antigua) | 1997 | 1.83  | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 2.78 | 1.51 | 0.51 | 1.20 | 1.49 | 0.18 |
| Serie Checua (Hidrologia Antigua) | 1998 | 0.18  | 0.00 | 0.00 | 0.98 | 4.57 | 2.30 | 2.67 | 2.43 | 0.00 | 3.76 | 1.34 | 2.09 |
| Serie Checua (Hidrologia Antigua) | 1999 | 0.53  | 0.00 | 1.28 | 1.24 | 0.61 | 0.42 | 0.72 | 0.81 | 2.40 | 6.94 | 5.23 | 0.67 |
| Serie Checua (Hidrologia Antigua) | 2000 | 0.00  | 0.00 | 1.59 | 1.14 | 0.33 | 0.19 | 0.61 | 0.00 | 3.40 | 3.33 | 3.83 | 0.31 |
| Serie Checua (Hidrologia Antigua) | 2001 | 3.38  | 3.04 | 1.14 | 3.50 | 4.31 | 1.93 | 3.35 | 0.01 | 2.90 | 4.07 | 4.11 | 1.81 |
| Serie Checua (Hidrologia Antigua) | 2002 | 0.58  | 0.69 | 0.86 | 3.22 | 3.74 | 8.01 | 4.37 | 4.00 | 4.59 | 3.88 | 2.30 | 1.27 |
| Serie Checua (Hidrologia Antigua) | 2003 | 0.37  | 0.74 | 1.63 | 2.94 | 2.22 | 1.82 | 2.31 | 1.75 | 1.26 | 2.69 | 2.92 | 1.95 |
| Serie Checua (Hidrologia Antigua) | 2004 | 0.61  | 0.10 | 0.08 | 1.11 | 4.04 | 3.65 | 2.13 | 3.59 | 3.70 | 4.25 | 5.64 | 1.30 |
| Serie Checua (Hidrologia Antigua) | 2005 | 0.10  | 0.18 | 0.02 | 0.68 | 3.72 | 2.16 | 1.78 | 2.09 | 2.88 | 6.83 | 6.58 | 2.02 |

|                                   |      |       |      |       |       |       |       |       |       |       |       |       |      |
|-----------------------------------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Serie Checua (Hidrologia Antigua) | 2006 | 0.00  | 0.00 | 0.00  | 1.99  | 7.97  | 4.85  | 2.72  | 0.00  | 0.00  | 0.34  | 1.34  | 0.00 |
| Serie Checua (Hidrologia Antigua) | 2007 | 0.00  | 0.31 | 0.00  | 2.28  | 1.11  | 1.52  | 1.49  | 0.80  | 2.87  | 0.00  | 0.00  | 0.00 |
| Serie Checua (Hidrologia Antigua) | 2008 | 0.00  | 0.00 | 0.00  | 0.00  | 0.59  | 0.67  | 0.82  | 0.94  | 0.53  | 1.09  | 2.70  | 1.98 |
| Serie Chuza (Hidrologia Antigua)  | 1967 | 5.48  | 2.22 | 7.42  | 13.00 | 18.90 | 35.97 | 29.26 | 31.27 | 11.06 | 16.99 | 10.70 | 3.97 |
| Serie Chuza (Hidrologia Antigua)  | 1968 | 1.63  | 1.58 | 1.84  | 23.18 | 8.08  | 28.93 | 40.43 | 17.56 | 13.47 | 12.55 | 8.91  | 4.56 |
| Serie Chuza (Hidrologia Antigua)  | 1969 | 3.65  | 3.84 | 3.89  | 14.57 | 13.88 | 15.64 | 15.42 | 17.41 | 9.77  | 14.96 | 11.59 | 6.30 |
| Serie Chuza (Hidrologia Antigua)  | 1970 | 8.24  | 3.48 | 11.01 | 17.66 | 18.05 | 31.29 | 21.75 | 20.50 | 17.12 | 17.70 | 13.33 | 6.20 |
| Serie Chuza (Hidrologia Antigua)  | 1971 | 3.37  | 4.76 | 12.86 | 16.10 | 19.56 | 25.67 | 30.60 | 20.07 | 15.55 | 11.39 | 9.47  | 5.44 |
| Serie Chuza (Hidrologia Antigua)  | 1972 | 11.90 | 5.46 | 8.37  | 16.91 | 23.43 | 26.63 | 27.61 | 18.88 | 15.23 | 8.93  | 8.77  | 4.25 |
| Serie Chuza (Hidrologia Antigua)  | 1973 | 2.18  | 1.70 | 2.15  | 5.31  | 20.82 | 26.16 | 21.14 | 19.62 | 23.71 | 12.91 | 14.13 | 9.75 |
| Serie Chuza (Hidrologia Antigua)  | 1974 | 3.89  | 3.51 | 4.75  | 13.01 | 17.89 | 17.68 | 23.00 | 18.25 | 12.33 | 9.29  | 8.54  | 2.23 |
| Serie Chuza (Hidrologia Antigua)  | 1975 | 1.74  | 1.60 | 8.35  | 7.81  | 22.85 | 31.19 | 14.07 | 16.27 | 11.95 | 13.92 | 8.43  | 9.93 |
| Serie Chuza (Hidrologia Antigua)  | 1976 | 4.91  | 2.39 | 5.65  | 18.17 | 29.72 | 31.12 | 33.80 | 19.14 | 13.59 | 12.63 | 9.52  | 5.74 |
| Serie Chuza (Hidrologia Antigua)  | 1977 | 1.63  | 3.47 | 4.61  | 7.57  | 14.14 | 20.79 | 23.97 | 20.10 | 16.32 | 14.31 | 13.09 | 5.99 |
| Serie Chuza (Hidrologia Antigua)  | 1978 | 1.57  | 3.22 | 3.43  | 13.88 | 16.26 | 25.75 | 17.64 | 15.03 | 11.63 | 12.65 | 4.12  | 3.64 |
| Serie Chuza (Hidrologia Antigua)  | 1979 | 1.44  | 1.10 | 3.97  | 11.81 | 10.11 | 20.19 | 13.73 | 12.63 | 8.56  | 16.24 | 12.82 | 7.30 |
| Serie Chuza (Hidrologia Antigua)  | 1980 | 3.18  | 2.05 | 4.36  | 12.17 | 9.10  | 25.62 | 17.25 | 14.53 | 11.82 | 13.79 | 5.83  | 2.78 |
| Serie Chuza (Hidrologia Antigua)  | 1981 | 1.49  | 4.07 | 4.85  | 12.83 | 22.09 | 20.54 | 16.36 | 11.49 | 11.75 | 14.23 | 6.97  | 3.56 |
| Serie Chuza (Hidrologia Antigua)  | 1982 | 1.73  | 2.89 | 3.72  | 17.25 | 16.65 | 12.95 | 31.40 | 20.78 | 13.36 | 16.10 | 8.55  | 3.33 |

|                                        |      |      |       |       |       |       |       |       |       |       |       |       |      |
|----------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1983 | 4.74 | 4.89  | 13.82 | 15.62 | 13.08 | 25.64 | 29.03 | 29.42 | 23.22 | 12.16 | 5.18  | 5.42 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1984 | 1.61 | 10.97 | 2.36  | 5.22  | 16.31 | 23.82 | 20.89 | 15.90 | 17.68 | 7.73  | 9.74  | 2.88 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1985 | 2.36 | 1.21  | 1.56  | 5.74  | 11.82 | 24.29 | 19.71 | 23.99 | 18.46 | 20.06 | 14.53 | 5.96 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1986 | 1.27 | 6.33  | 6.77  | 8.76  | 12.31 | 30.54 | 30.54 | 16.71 | 7.45  | 13.36 | 7.12  | 3.93 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1987 | 2.78 | 4.09  | 4.23  | 10.49 | 13.09 | 12.91 | 28.47 | 18.99 | 9.48  | 9.88  | 7.33  | 6.31 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1988 | 1.56 | 2.44  | 2.25  | 7.58  | 13.80 | 19.52 | 27.55 | 12.48 | 12.37 | 8.04  | 14.42 | 7.26 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1989 | 3.56 | 4.81  | 7.09  | 10.81 | 20.22 | 28.44 | 23.81 | 13.56 | 9.39  | 14.38 | 8.38  | 4.82 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1990 | 5.44 | 4.49  | 12.94 | 12.36 | 27.01 | 22.71 | 19.17 | 15.12 | 9.99  | 8.15  | 7.56  | 7.08 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1991 | 2.14 | 3.55  | 4.28  | 8.66  | 14.51 | 19.70 | 38.20 | 24.49 | 9.15  | 7.39  | 10.73 | 1.90 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1992 | 1.21 | 1.45  | 2.58  | 8.70  | 8.94  | 15.28 | 29.91 | 18.53 | 11.89 | 7.67  | 9.30  | 3.61 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1993 | 3.25 | 4.00  | 7.90  | 18.87 | 16.02 | 24.11 | 27.88 | 16.64 | 10.15 | 11.49 | 10.47 | 4.35 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1994 | 1.78 | 2.12  | 5.09  | 12.45 | 24.23 | 28.52 | 28.75 | 19.58 | 14.53 | 10.68 | 8.22  | 5.42 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1995 | 2.40 | 1.02  | 5.45  | 8.58  | 16.01 | 19.02 | 16.91 | 9.18  | 9.14  | 8.18  | 6.29  | 2.71 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1996 | 2.07 | 10.52 | 6.58  | 11.83 | 23.56 | 18.75 | 27.26 | 15.13 | 8.14  | 10.65 | 6.86  | 7.19 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1997 | 4.15 | 9.66  | 4.01  | 11.71 | 19.54 | 26.70 | 23.98 | 13.36 | 6.93  | 5.68  | 3.78  | 1.48 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1998 | 0.66 | 0.51  | 2.26  | 9.47  | 22.55 | 28.95 | 30.97 | 17.70 | 6.37  | 9.07  | 6.79  | 8.08 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 1999 | 5.21 | 8.23  | 6.70  | 20.55 | 12.76 | 21.73 | 10.05 | 9.05  | 11.16 | 13.34 | 5.90  | 3.81 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 2000 | 4.50 | 5.15  | 5.25  | 10.70 | 26.85 | 20.64 | 15.32 | 13.69 | 10.04 | 9.02  | 9.98  | 6.55 |
| Serie Chuza<br>(Hidrologia<br>Antigua) | 2001 | 2.22 | 3.36  | 4.11  | 11.78 | 19.16 | 22.09 | 17.82 | 19.46 | 19.54 | 5.83  | 10.17 | 3.63 |

|                                                               |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2002 | 2.32  | 1.40  | 10.37 | 15.57 | 22.69 | 17.16 | 31.65 | 31.25 | 33.60 | 23.63 | 7.56  | 2.82  |
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2003 | 0.80  | 1.34  | 7.79  | 13.39 | 23.76 | 15.44 | 38.17 | 38.45 | 33.96 | 11.13 | 13.90 | 6.19  |
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2004 | 1.74  | 1.67  | 8.51  | 7.92  | 15.64 | 33.54 | 17.85 | 16.11 | 5.24  | 8.12  | 8.02  | 3.27  |
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2005 | 1.97  | 2.91  | 1.64  | 10.93 | 16.42 | 15.65 | 12.36 | 13.88 | 12.96 | 9.84  | 11.41 | 1.96  |
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2006 | 2.15  | 1.09  | 7.76  | 16.45 | 18.73 | 20.23 | 21.49 | 12.38 | 6.36  | 10.73 | 9.22  | 2.41  |
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2007 | 0.81  | 0.48  | 3.17  | 12.33 | 14.96 | 31.55 | 13.85 | 14.51 | 9.52  | 10.01 | 8.07  | 8.60  |
| Serie Chuza<br>(Hidrologia<br>Antigua)                        | 2008 | 2.28  | 1.79  | 2.95  | 2.95  | 17.65 | 24.45 | 23.69 | 10.54 | 9.16  | 4.57  | 10.04 | 2.28  |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1965 | 0.15  | 0.00  | 0.00  | 9.88  | 30.61 | 11.18 | 9.14  | 7.28  | 0.00  | 11.64 | 30.71 | 17.38 |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1966 | 0.00  | 0.00  | 3.10  | 2.85  | 3.88  | 7.52  | 6.60  | 8.81  | 2.58  | 10.02 | 14.73 | 47.38 |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1967 | 3.95  | 4.68  | 1.89  | 9.27  | 23.76 | 34.22 | 22.70 | 18.97 | 6.34  | 5.70  | 12.96 | 10.74 |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1968 | 2.39  | 4.06  | 4.13  | 16.89 | 12.91 | 33.52 | 22.56 | 14.66 | 12.76 | 21.26 | 26.38 | 12.66 |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1969 | 4.15  | 4.69  | 0.00  | 20.12 | 24.04 | 17.17 | 14.21 | 8.36  | 1.72  | 45.17 | 27.51 | 12.53 |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1970 | 6.07  | 5.51  | 4.03  | 3.33  | 10.36 | 12.30 | 10.12 | 7.69  | 8.02  | 29.02 | 40.15 | 10.52 |
| Serie Filo de<br>Agua<br>Alicachin<br>(Hidrologia<br>Antigua) | 1971 | 10.21 | 13.24 | 14.47 | 34.33 | 42.69 | 32.29 | 15.41 | 14.03 | 18.31 | 16.09 | 24.40 | 11.93 |

|                                                   |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1972 | 16.89 | 11.25 | 7.12  | 24.36 | 49.72 | 0.76  | 9.22  | 0.00  | 0.00  | 3.11  | 14.01 | 0.00  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1973 | 0.00  | 0.00  | 0.00  | 0.00  | 1.11  | 2.79  | 5.42  | 7.85  | 21.57 | 12.40 | 17.67 | 24.38 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1974 | 5.09  | 14.99 | 14.32 | 13.52 | 26.17 | 7.77  | 9.01  | 7.67  | 6.80  | 10.97 | 31.29 | 10.76 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1975 | 0.00  | 2.79  | 5.81  | 1.53  | 16.64 | 18.51 | 13.02 | 11.19 | 15.23 | 11.84 | 26.49 | 42.83 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1976 | 12.55 | 7.83  | 8.72  | 33.13 | 41.35 | 35.86 | 50.93 | 13.06 | 0.00  | 16.24 | 25.02 | 6.15  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1977 | 0.00  | 1.17  | 0.00  | 3.37  | 8.57  | 4.32  | 9.56  | 4.74  | 8.30  | 14.07 | 29.47 | 3.23  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1978 | 2.27  | 0.89  | 2.14  | 14.90 | 10.67 | 19.34 | 13.80 | 6.80  | 4.52  | 8.42  | 5.23  | 3.54  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1979 | 0.53  | 0.00  | 3.77  | 3.07  | 22.99 | 33.25 | 9.75  | 4.73  | 13.01 | 10.50 | 57.50 | 34.60 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1980 | 9.84  | 7.04  | 0.87  | 0.00  | 3.81  | 21.19 | 8.26  | 2.43  | 6.80  | 8.35  | 3.16  | 4.45  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1981 | 0.00  | 0.57  | 0.00  | 8.58  | 31.29 | 15.13 | 1.09  | 0.00  | 4.02  | 6.42  | 18.14 | 5.92  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1982 | 4.85  | 2.49  | 6.54  | 44.84 | 38.86 | 9.54  | 4.16  | 5.08  | 4.23  | 11.00 | 3.50  | 3.85  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1983 | 0.00  | 0.00  | 8.99  | 22.26 | 21.21 | 6.89  | 9.56  | 2.30  | 2.06  | 4.36  | 0.49  | 5.01  |

|                                                   |      |      |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1984 | 9.11 | 6.80  | 2.17  | 4.67  | 13.38 | 13.54 | 6.40  | 12.52 | 10.11 | 11.89 | 13.39 | 8.48  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1985 | 2.90 | 0.06  | 0.92  | 3.51  | 8.75  | 0.00  | 2.96  | 7.14  | 12.05 | 18.19 | 27.91 | 10.05 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1986 | 1.35 | 0.00  | 12.22 | 9.12  | 7.44  | 33.82 | 32.42 | 14.59 | 0.00  | 43.04 | 42.13 | 9.24  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1987 | 0.95 | 0.52  | 0.00  | 0.66  | 19.33 | 3.91  | 14.96 | 10.73 | 5.55  | 20.73 | 11.87 | 6.64  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1988 | 0.00 | 2.09  | 0.00  | 4.25  | 6.84  | 15.79 | 15.38 | 9.39  | 15.77 | 24.29 | 36.19 | 29.73 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1989 | 5.28 | 11.61 | 21.35 | 8.34  | 15.13 | 16.90 | 15.14 | 4.63  | 5.57  | 8.16  | 8.55  | 8.64  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1990 | 4.47 | 6.43  | 2.13  | 12.89 | 33.83 | 14.66 | 7.65  | 7.74  | 0.00  | 18.36 | 14.81 | 21.76 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1991 | 1.09 | 0.00  | 10.38 | 13.88 | 11.76 | 5.29  | 17.56 | 16.97 | 12.33 | 3.79  | 17.62 | 7.53  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1992 | 0.00 | 0.00  | 0.00  | 3.57  | 1.90  | 0.00  | 4.05  | 8.41  | 2.63  | 0.98  | 8.83  | 7.55  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1993 | 2.25 | 2.45  | 2.51  | 8.52  | 19.73 | 13.23 | 12.85 | 0.93  | 3.40  | 1.79  | 17.82 | 7.70  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1994 | 1.68 | 3.72  | 8.18  | 12.42 | 20.77 | 15.60 | 10.89 | 4.22  | 1.49  | 9.57  | 20.06 | 5.79  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1995 | 0.00 | 0.00  | 5.83  | 12.16 | 14.06 | 17.10 | 7.43  | 12.43 | 6.70  | 8.08  | 9.63  | 11.69 |

|                                                   |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1996 | 0.00  | 4.97  | 17.50 | 6.95  | 19.06 | 11.90 | 22.90 | 17.10 | 1.95  | 17.68 | 6.68  | 7.28  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1997 | 13.95 | 1.36  | 0.00  | 0.89  | 2.83  | 5.38  | 22.13 | 5.57  | 0.00  | 0.15  | 3.47  | 0.00  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1998 | 0.00  | 0.00  | 0.00  | 5.97  | 20.22 | 22.87 | 20.54 | 17.46 | 6.45  | 13.36 | 17.41 | 21.45 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 1999 | 9.81  | 14.50 | 23.46 | 19.23 | 12.66 | 10.79 | 0.04  | 8.89  | 18.83 | 32.25 | 41.58 | 15.02 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2000 | 2.25  | 9.36  | 0.00  | 4.99  | 11.43 | 9.81  | 12.79 | 9.34  | 0.00  | 2.42  | 1.25  | 4.50  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2001 | 0.00  | 3.97  | 0.00  | 8.42  | 3.52  | 5.03  | 2.61  | 12.37 | 8.59  | 2.11  | 0.58  | 4.83  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2002 | 1.47  | 1.69  | 2.87  | 15.91 | 14.86 | 37.48 | 16.79 | 5.76  | 3.18  | 2.24  | 9.31  | 4.09  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2003 | 2.19  | 3.75  | 11.23 | 18.77 | 3.63  | 8.96  | 15.00 | 17.44 | 9.40  | 16.48 | 22.46 | 21.86 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2004 | 1.09  | 4.10  | 5.65  | 18.84 | 18.53 | 21.49 | 12.41 | 14.04 | 15.71 | 15.40 | 34.00 | 14.26 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2005 | 1.02  | 5.96  | 0.88  | 7.41  | 29.18 | 13.55 | 9.25  | 9.21  | 7.56  | 25.82 | 22.35 | 12.50 |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2006 | 11.26 | 1.81  | 13.78 | 33.31 | 61.74 | 34.74 | 9.43  | 7.94  | 3.59  | 15.03 | 33.35 | 8.32  |
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2007 | 0.00  | 0.00  | 0.07  | 13.92 | 8.86  | 15.68 | 8.77  | 8.99  | 0.00  | 22.67 | 24.60 | 21.71 |

|                                                   |      |       |       |       |        |        |        |        |        |        |        |       |       |
|---------------------------------------------------|------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| Serie Filo de Agua Alicachin (Hidrologia Antigua) | 2008 | 4.72  | 8.60  | 12.70 | 16.67  | 41.98  | 36.96  | 29.65  | 21.55  | 18.34  | 20.86  | 39.06 | 29.24 |
| Serie Guavio                                      | 1963 | 13.30 | 19.30 | 15.70 | 60.60  | 113.80 | 110.30 | 105.50 | 104.70 | 79.30  | 36.30  | 43.60 | 28.20 |
| Serie Guavio                                      | 1964 | 10.70 | 11.00 | 21.10 | 56.40  | 104.90 | 131.60 | 100.70 | 101.20 | 97.80  | 63.60  | 54.00 | 43.50 |
| Serie Guavio                                      | 1965 | 39.20 | 13.40 | 14.50 | 68.00  | 131.60 | 114.20 | 144.90 | 111.20 | 59.90  | 71.60  | 71.70 | 42.30 |
| Serie Guavio                                      | 1966 | 21.80 | 12.60 | 37.60 | 37.70  | 37.50  | 47.50  | 90.90  | 103.30 | 67.80  | 42.70  | 62.40 | 51.80 |
| Serie Guavio                                      | 1967 | 35.70 | 25.10 | 21.60 | 64.50  | 92.50  | 144.20 | 129.00 | 138.60 | 84.80  | 44.70  | 40.70 | 34.00 |
| Serie Guavio                                      | 1968 | 13.30 | 14.20 | 22.80 | 101.10 | 72.70  | 143.20 | 206.00 | 101.10 | 72.10  | 72.00  | 58.80 | 20.60 |
| Serie Guavio                                      | 1969 | 15.60 | 18.40 | 18.60 | 60.70  | 86.00  | 86.60  | 114.00 | 99.40  | 58.70  | 92.60  | 53.10 | 35.30 |
| Serie Guavio                                      | 1970 | 33.40 | 21.10 | 45.70 | 99.90  | 104.00 | 163.90 | 134.00 | 128.70 | 98.10  | 87.40  | 62.50 | 35.10 |
| Serie Guavio                                      | 1971 | 24.30 | 29.90 | 56.70 | 87.60  | 120.20 | 154.80 | 174.10 | 132.40 | 99.00  | 70.60  | 48.20 | 28.20 |
| Serie Guavio                                      | 1972 | 55.50 | 27.40 | 38.00 | 87.50  | 157.50 | 157.50 | 171.80 | 129.30 | 90.10  | 46.00  | 46.50 | 21.60 |
| Serie Guavio                                      | 1973 | 13.60 | 10.90 | 12.50 | 30.40  | 98.70  | 137.90 | 130.90 | 106.90 | 118.60 | 71.10  | 66.90 | 33.72 |
| Serie Guavio                                      | 1974 | 16.80 | 21.10 | 31.80 | 80.50  | 118.80 | 110.20 | 145.80 | 126.10 | 62.60  | 52.60  | 43.60 | 17.00 |
| Serie Guavio                                      | 1975 | 11.50 | 9.60  | 40.80 | 46.30  | 96.70  | 197.60 | 96.20  | 114.70 | 75.40  | 73.10  | 50.50 | 44.70 |
| Serie Guavio                                      | 1976 | 20.20 | 17.60 | 45.50 | 72.70  | 162.70 | 203.20 | 213.60 | 107.00 | 74.50  | 59.40  | 48.10 | 30.70 |
| Serie Guavio                                      | 1977 | 11.30 | 15.90 | 19.10 | 38.00  | 65.60  | 124.90 | 172.00 | 89.50  | 83.30  | 63.30  | 50.90 | 16.40 |
| Serie Guavio                                      | 1978 | 9.70  | 14.60 | 13.90 | 63.50  | 86.90  | 148.80 | 117.80 | 90.90  | 66.30  | 77.30  | 28.00 | 26.30 |
| Serie Guavio                                      | 1979 | 11.10 | 8.40  | 23.00 | 67.60  | 72.30  | 125.30 | 102.40 | 90.70  | 55.90  | 95.30  | 78.50 | 51.70 |
| Serie Guavio                                      | 1980 | 20.00 | 11.70 | 19.40 | 70.00  | 71.00  | 167.80 | 108.30 | 79.90  | 77.60  | 75.80  | 32.10 | 20.90 |
| Serie Guavio                                      | 1981 | 10.50 | 16.40 | 22.50 | 59.80  | 107.60 | 131.30 | 106.70 | 77.90  | 86.00  | 78.90  | 57.70 | 28.80 |
| Serie Guavio                                      | 1982 | 15.70 | 19.10 | 27.90 | 114.00 | 106.20 | 88.40  | 159.20 | 116.90 | 95.90  | 77.80  | 45.90 | 30.40 |
| Serie Guavio                                      | 1983 | 32.10 | 45.40 | 71.60 | 103.60 | 102.90 | 115.80 | 160.00 | 115.60 | 102.00 | 75.30  | 35.90 | 40.90 |
| Serie Guavio                                      | 1984 | 21.50 | 70.60 | 32.00 | 40.20  | 89.70  | 232.00 | 139.00 | 139.60 | 92.60  | 48.30  | 53.90 | 20.70 |
| Serie Guavio                                      | 1985 | 12.90 | 9.20  | 14.20 | 42.50  | 107.60 | 157.00 | 115.20 | 105.80 | 96.20  | 76.90  | 55.60 | 40.10 |
| Serie Guavio                                      | 1986 | 14.40 | 28.20 | 39.70 | 50.70  | 80.80  | 187.10 | 240.00 | 145.60 | 66.00  | 98.90  | 54.80 | 30.50 |
| Serie Guavio                                      | 1987 | 13.90 | 31.00 | 22.20 | 41.70  | 71.80  | 78.00  | 221.00 | 178.10 | 63.20  | 68.00  | 47.90 | 36.20 |
| Serie Guavio                                      | 1988 | 13.90 | 12.20 | 10.60 | 35.40  | 70.40  | 102.80 | 157.30 | 79.40  | 80.90  | 70.50  | 87.00 | 43.90 |
| Serie Guavio                                      | 1989 | 25.40 | 27.90 | 56.00 | 65.00  | 137.40 | 160.50 | 155.90 | 83.90  | 63.50  | 54.10  | 42.40 | 23.30 |
| Serie Guavio                                      | 1990 | 19.20 | 25.00 | 68.50 | 76.00  | 167.70 | 169.40 | 124.60 | 100.40 | 51.50  | 42.40  | 41.10 | 36.80 |
| Serie Guavio                                      | 1991 | 15.70 | 16.80 | 27.00 | 51.10  | 92.60  | 127.10 | 225.20 | 163.60 | 86.70  | 57.70  | 49.20 | 18.50 |
| Serie Guavio                                      | 1992 | 12.73 | 13.06 | 13.29 | 41.44  | 48.82  | 85.93  | 160.09 | 122.64 | 71.14  | 56.51  | 47.90 | 22.92 |
| Serie Guavio                                      | 1993 | 13.86 | 15.97 | 38.42 | 90.09  | 98.57  | 149.57 | 183.39 | 108.91 | 78.53  | 60.35  | 54.53 | 32.06 |
| Serie Guavio                                      | 1994 | 15.17 | 13.09 | 31.71 | 67.57  | 151.83 | 175.75 | 206.69 | 135.38 | 94.18  | 77.43  | 55.55 | 31.22 |
| Serie Guavio                                      | 1995 | 16.83 | 10.26 | 27.94 | 39.42  | 85.94  | 106.89 | 87.94  | 61.70  | 46.35  | 47.23  | 38.59 | 20.79 |
| Serie Guavio                                      | 1996 | 11.55 | 39.94 | 31.40 | 60.47  | 127.53 | 110.75 | 166.68 | 91.21  | 48.28  | 66.42  | 37.11 | 40.28 |
| Serie Guavio                                      | 1997 | 16.74 | 31.07 | 17.90 | 54.09  | 131.74 | 96.71  | 208.38 | 98.37  | 48.17  | 32.94  | 29.45 | 14.46 |
| Serie Guavio                                      | 1998 | 9.33  | 13.41 | 16.08 | 51.98  | 128.73 | 190.56 | 209.55 | 105.02 | 50.48  | 51.79  | 45.10 | 38.28 |
| Serie Guavio                                      | 1999 | 23.32 | 33.19 | 29.46 | 127.77 | 104.96 | 159.01 | 87.50  | 86.14  | 72.35  | 113.03 | 46.71 | 28.72 |
| Serie Guavio                                      | 2000 | 23.02 | 24.51 | 25.85 | 41.95  | 146.27 | 139.62 | 118.32 | 129.14 | 85.60  | 62.67  | 72.31 | 40.97 |
| Serie Guavio                                      | 2001 | 19.22 | 12.66 | 19.74 | 43.95  | 105.53 | 140.23 | 115.78 | 128.78 | 89.91  | 43.36  | 59.61 | 47.49 |
| Serie Guavio                                      | 2002 | 18.86 | 13.48 | 40.12 | 88.12  | 139.10 | 163.08 | 151.23 | 147.00 | 68.93  | 49.83  | 53.11 | 21.42 |
| Serie Guavio                                      | 2003 | 10.58 | 9.79  | 25.93 | 65.55  | 127.51 | 83.31  | 110.21 | 114.89 | 80.60  | 72.78  | 45.62 | 32.65 |

|                                        |      |       |       |       |        |        |        |        |        |       |       |       |       |
|----------------------------------------|------|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| Serie Guavio                           | 2004 | 16.10 | 16.11 | 51.90 | 76.63  | 164.66 | 234.87 | 135.73 | 132.27 | 70.34 | 63.32 | 46.43 | 24.26 |
| Serie Guavio                           | 2005 | 14.83 | 26.09 | 18.53 | 84.44  | 118.71 | 100.71 | 80.38  | 90.67  | 94.17 | 65.80 | 80.09 | 21.89 |
| Serie Guavio                           | 2006 | 19.02 | 13.73 | 58.93 | 115.96 | 120.67 | 134.70 | 114.52 | 80.75  | 50.01 | 69.83 | 56.15 | 24.35 |
| Serie Guavio                           | 2007 | 12.30 | 9.33  | 23.94 | 67.25  | 86.45  | 156.08 | 83.28  | 81.46  | 68.90 | 58.78 | 58.74 | 30.16 |
| Serie Guavio                           | 2008 | 19.57 | 14.99 | 15.00 | 22.72  | 76.70  | 154.73 | 159.28 | 85.12  | 73.12 | 51.29 | 84.16 | 33.57 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1953 | 0.92  | 0.37  | 0.51  | 0.79   | 2.14   | 1.97   | 0.72   | 0.92   | 1.28  | 3.47  | 3.25  | 1.02  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1954 | 0.50  | 0.38  | 0.41  | 0.89   | 1.43   | 1.88   | 1.43   | 1.43   | 1.28  | 5.20  | 5.23  | 1.63  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1955 | 1.12  | 0.92  | 1.63  | 6.61   | 2.96   | 2.96   | 2.55   | 1.12   | 2.37  | 6.22  | 4.34  | 1.61  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1956 | 1.12  | 1.81  | 2.64  | 1.78   | 2.34   | 2.86   | 2.14   | 1.32   | 1.48  | 7.03  | 4.63  | 2.75  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1957 | 0.92  | 1.01  | 1.22  | 1.48   | 5.20   | 1.58   | 0.72   | 0.61   | 0.40  | 2.04  | 2.76  | 1.63  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1958 | 0.92  | 0.55  | 0.61  | 0.59   | 1.32   | 1.78   | 1.43   | 1.32   | 0.69  | 1.73  | 2.37  | 0.81  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1959 | 0.21  | 0.46  | 1.12  | 1.38   | 2.45   | 1.18   | 1.94   | 0.92   | 0.99  | 3.06  | 1.40  | 1.12  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1960 | 1.53  | 0.57  | 1.02  | 2.66   | 1.73   | 1.68   | 1.63   | 1.32   | 0.99  | 2.24  | 1.68  | 1.94  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1961 | 0.72  | 0.46  | 1.22  | 1.68   | 0.81   | 0.89   | 0.92   | 0.61   | 0.59  | 1.94  | 3.35  | 0.72  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1962 | 0.61  | 0.64  | 1.12  | 1.58   | 2.45   | 2.47   | 1.83   | 1.83   | 0.99  | 1.53  | 5.13  | 1.32  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1963 | 1.02  | 1.10  | 1.12  | 1.88   | 5.20   | 1.88   | 1.12   | 1.22   | 0.99  | 1.22  | 3.65  | 1.12  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1964 | 0.61  | 0.57  | 0.21  | 1.38   | 1.32   | 3.25   | 1.43   | 0.72   | 0.59  | 0.72  | 1.08  | 1.22  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1965 | 0.81  | 0.74  | 0.61  | 2.56   | 1.16   | 0.79   | 0.92   | 1.53   | 0.69  | 4.69  | 7.10  | 1.83  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1966 | 1.22  | 0.64  | 1.32  | 1.08   | 2.05   | 1.88   | 1.22   | 1.53   | 1.48  | 2.64  | 4.24  | 4.49  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1967 | 1.44  | 1.52  | 0.89  | 1.54   | 2.23   | 3.31   | 3.41   | 1.77   | 0.95  | 1.35  | 2.82  | 1.77  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1968 | 0.73  | 0.61  | 0.57  | 3.86   | 3.19   | 4.56   | 2.49   | 2.79   | 2.48  | 2.81  | 2.96  | 0.80  |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1969 | 1.54  | 1.07  | 0.92  | 2.72   | 3.13   | 1.67   | 1.98   | 1.23   | 1.91  | 5.30  | 2.02  | 1.29  |

|                                        |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1970 | 1.05 | 1.01 | 0.84 | 0.98 | 1.78 | 1.25 | 1.25 | 0.82 | 1.70 | 3.98 | 3.83 | 1.25 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1971 | 1.66 | 1.70 | 2.49 | 3.19 | 5.06 | 2.97 | 1.74 | 1.73 | 2.79 | 2.52 | 3.87 | 2.01 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1972 | 3.18 | 1.35 | 1.44 | 4.67 | 4.46 | 4.18 | 3.62 | 1.29 | 2.08 | 1.49 | 2.70 | 1.22 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1973 | 1.70 | 1.66 | 2.00 | 2.11 | 1.04 | 1.10 | 1.17 | 1.28 | 4.04 | 2.25 | 3.51 | 2.41 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1974 | 1.45 | 1.31 | 1.47 | 2.19 | 2.55 | 0.97 | 0.98 | 0.89 | 2.60 | 2.36 | 4.02 | 1.91 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1975 | 1.68 | 0.83 | 1.08 | 1.36 | 1.51 | 1.48 | 2.50 | 1.58 | 1.81 | 2.72 | 3.60 | 4.57 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1976 | 1.00 | 1.73 | 1.57 | 3.32 | 2.98 | 2.64 | 2.66 | 2.23 | 1.91 | 3.80 | 3.74 | 1.88 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1977 | 1.59 | 1.16 | 1.15 | 2.05 | 1.65 | 2.25 | 1.53 | 1.27 | 2.25 | 1.67 | 3.99 | 1.69 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1978 | 1.01 | 1.20 | 0.86 | 3.42 | 1.80 | 2.04 | 1.27 | 0.88 | 1.01 | 1.89 | 0.95 | 0.82 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1979 | 0.45 | 0.48 | 1.21 | 2.70 | 3.18 | 3.91 | 1.95 | 2.25 | 1.98 | 6.12 | 5.92 | 2.62 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1980 | 1.65 | 1.95 | 1.23 | 1.39 | 1.32 | 1.90 | 1.13 | 0.72 | 0.69 | 2.21 | 1.31 | 0.46 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1981 | 0.50 | 0.61 | 1.40 | 2.75 | 6.57 | 2.35 | 1.11 | 1.03 | 1.24 | 1.97 | 3.28 | 1.85 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1982 | 1.58 | 2.54 | 1.88 | 4.06 | 4.33 | 1.89 | 1.44 | 1.49 | 1.66 | 2.96 | 2.28 | 1.76 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1983 | 1.19 | 1.20 | 1.23 | 2.99 | 1.82 | 0.91 | 1.40 | 1.11 | 0.95 | 1.26 | 1.26 | 1.81 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1984 | 1.25 | 1.32 | 1.11 | 1.60 | 2.08 | 1.50 | 0.76 | 1.15 | 1.63 | 2.02 | 2.16 | 0.87 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1985 | 0.64 | 0.51 | 1.08 | 1.13 | 1.68 | 1.09 | 1.29 | 0.84 | 1.96 | 3.14 | 3.00 | 0.99 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1986 | 0.86 | 0.93 | 0.97 | 0.80 | 0.96 | 2.71 | 2.36 | 1.72 | 1.62 | 5.80 | 3.44 | 1.17 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1987 | 1.07 | 1.14 | 2.24 | 1.20 | 1.97 | 1.05 | 1.18 | 0.97 | 1.32 | 3.62 | 1.89 | 1.68 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1988 | 0.70 | 0.67 | 0.77 | 1.06 | 0.62 | 1.45 | 1.38 | 1.11 | 1.41 | 2.78 | 3.71 | 2.29 |

|                                        |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1989 | 1.08 | 0.71 | 2.00 | 0.89 | 3.12 | 1.77 | 2.15 | 1.29 | 2.39 | 2.09 | 1.13 | 0.73 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1990 | 0.28 | 1.31 | 1.61 | 2.53 | 4.21 | 1.61 | 1.20 | 1.21 | 1.03 | 2.82 | 2.22 | 3.22 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1991 | 0.80 | 0.76 | 1.55 | 0.92 | 1.25 | 0.40 | 1.20 | 1.94 | 1.19 | 0.65 | 3.44 | 1.23 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1992 | 0.69 | 0.83 | 0.44 | 0.62 | 0.35 | 0.36 | 0.73 | 0.63 | 0.28 | 0.12 | 0.86 | 1.17 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1993 | 0.27 | 0.15 | 0.38 | 0.74 | 3.17 | 1.71 | 1.40 | 1.00 | 1.21 | 1.10 | 2.44 | 0.92 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1994 | 1.15 | 1.01 | 0.87 | 1.91 | 2.30 | 1.15 | 2.32 | 0.95 | 1.11 | 2.47 | 2.87 | 0.67 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1995 | 0.45 | 0.66 | 1.08 | 1.15 | 0.91 | 0.56 | 0.49 | 2.02 | 1.02 | 1.19 | 1.54 | 1.49 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1996 | 0.68 | 0.58 | 2.95 | 1.33 | 1.29 | 1.24 | 2.49 | 1.48 | 1.10 | 2.69 | 1.27 | 1.61 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1997 | 1.85 | 1.30 | 1.14 | 1.85 | 1.60 | 2.09 | 1.83 | 1.23 | 0.66 | 2.37 | 0.72 | 0.35 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1998 | 1.13 | 1.12 | 1.21 | 2.09 | 2.47 | 1.95 | 1.64 | 1.34 | 1.63 | 2.56 | 2.99 | 1.71 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 1999 | 0.57 | 1.37 | 1.56 | 1.88 | 0.61 | 0.50 | 0.39 | 0.65 | 2.90 | 5.48 | 3.12 | 2.41 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2000 | 1.31 | 1.22 | 1.71 | 1.25 | 0.70 | 0.94 | 0.90 | 0.97 | 1.91 | 1.28 | 1.69 | 0.68 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2001 | 1.01 | 1.02 | 1.22 | 1.95 | 2.29 | 1.80 | 1.55 | 1.27 | 1.46 | 2.59 | 2.89 | 1.55 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2002 | 0.24 | 0.33 | 0.81 | 1.87 | 2.42 | 3.74 | 1.67 | 1.92 | 1.25 | 1.15 | 1.30 | 0.68 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2003 | 0.78 | 0.59 | 0.73 | 2.42 | 1.49 | 0.71 | 0.70 | 1.04 | 0.86 | 2.06 | 2.71 | 2.44 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2004 | 0.68 | 0.72 | 0.81 | 1.13 | 2.91 | 2.21 | 1.39 | 1.00 | 1.45 | 1.98 | 4.38 | 1.01 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2005 | 0.71 | 0.95 | 0.84 | 0.85 | 2.08 | 0.79 | 0.73 | 1.00 | 1.16 | 2.68 | 2.77 | 1.46 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2006 | 0.72 | 0.36 | 1.59 | 4.26 | 5.56 | 3.52 | 2.12 | 1.39 | 0.97 | 1.65 | 3.89 | 1.48 |
| Serie Neusa<br>(Hidrologia<br>Antigua) | 2007 | 0.75 | 0.43 | 0.74 | 1.27 | 0.99 | 1.33 | 1.13 | 1.89 | 2.01 | 3.75 | 2.12 | 1.40 |

|                                          |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Neusa<br>(Hidrologia Antigua)      | 2008 | 1.08 | 1.40 | 0.45 | 2.43 | 3.11 | 1.93 | 2.08 | 1.62 | 2.30 | 2.39 | 4.34 | 3.03 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1972 | 1.35 | 0.88 | 1.25 | 2.09 | 3.22 | 2.74 | 3.32 | 2.17 | 2.87 | 1.80 | 1.67 | 1.04 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1973 | 0.45 | 0.45 | 0.42 | 0.45 | 1.69 | 2.62 | 3.09 | 2.02 | 3.92 | 2.29 | 1.97 | 2.02 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1974 | 1.08 | 1.11 | 1.65 | 1.45 | 4.11 | 2.82 | 3.84 | 2.48 | 2.78 | 2.50 | 2.47 | 0.87 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1975 | 0.44 | 0.45 | 1.15 | 1.28 | 2.18 | 3.97 | 2.73 | 3.52 | 2.76 | 2.35 | 1.86 | 1.80 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1976 | 0.64 | 0.35 | 1.74 | 2.78 | 3.27 | 3.48 | 4.26 | 2.21 | 1.83 | 2.30 | 1.85 | 0.70 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1977 | 0.43 | 0.31 | 0.99 | 1.19 | 2.16 | 2.60 | 3.09 | 2.07 | 1.72 | 2.21 | 2.65 | 1.70 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1978 | 0.55 | 0.43 | 1.23 | 1.82 | 2.11 | 4.39 | 2.98 | 2.48 | 1.91 | 1.83 | 1.25 | 0.62 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1979 | 0.24 | 0.18 | 0.97 | 1.99 | 2.26 | 3.20 | 2.38 | 2.32 | 2.03 | 2.53 | 2.24 | 1.62 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1980 | 0.30 | 0.25 | 0.24 | 1.57 | 1.68 | 3.16 | 2.07 | 1.53 | 1.31 | 1.27 | 0.57 | 0.20 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1981 | 0.16 | 0.14 | 0.15 | 1.76 | 3.08 | 1.98 | 2.25 | 1.67 | 1.80 | 1.85 | 1.20 | 0.44 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1982 | 0.29 | 0.45 | 0.99 | 2.35 | 1.92 | 1.48 | 2.38 | 1.78 | 1.33 | 1.39 | 0.82 | 0.47 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1983 | 0.36 | 0.56 | 0.68 | 1.96 | 1.44 | 1.70 | 2.80 | 2.22 | 1.28 | 1.17 | 0.68 | 0.67 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1984 | 0.95 | 1.02 | 0.50 | 0.62 | 1.41 | 4.52 | 3.16 | 3.41 | 2.27 | 1.33 | 3.22 | 0.55 |
| Serie Rio Blanco<br>(Hidrologia Antigua) | 1985 | 0.51 | 0.41 | 0.39 | 0.53 | 1.61 | 2.41 | 2.97 | 2.10 | 3.07 | 2.75 | 2.62 | 0.86 |

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Rio Blanco (Hidrologia Antigua) | 1986 | 0.53 | 1.32 | 1.36 | 1.35 | 2.30 | 7.62 | 6.87 | 2.53 | 2.32 | 2.75 | 2.86 | 0.72 |
| Serie Rio Blanco (Hidrologia Antigua) | 1987 | 0.48 | 0.51 | 0.84 | 1.46 | 2.47 | 2.77 | 3.67 | 3.91 | 1.85 | 2.57 | 1.69 | 0.95 |
| Serie Rio Blanco (Hidrologia Antigua) | 1988 | 0.44 | 0.38 | 0.67 | 1.49 | 2.15 | 3.03 | 3.96 | 2.64 | 2.34 | 1.91 | 2.47 | 1.56 |
| Serie Rio Blanco (Hidrologia Antigua) | 1989 | 0.94 | 0.91 | 1.84 | 1.23 | 2.56 | 2.52 | 2.80 | 1.56 | 1.76 | 1.43 | 1.40 | 1.20 |
| Serie Rio Blanco (Hidrologia Antigua) | 1990 | 0.56 | 0.72 | 1.24 | 1.16 | 5.08 | 3.32 | 3.52 | 3.52 | 1.08 | 2.00 | 1.28 | 1.08 |
| Serie Rio Blanco (Hidrologia Antigua) | 1991 | 0.45 | 0.63 | 1.01 | 1.70 | 2.27 | 2.62 | 4.30 | 2.88 | 2.53 | 1.84 | 1.63 | 1.57 |
| Serie Rio Blanco (Hidrologia Antigua) | 1992 | 0.85 | 0.97 | 0.78 | 1.39 | 2.35 | 2.93 | 4.93 | 2.57 | 2.43 | 1.92 | 1.96 | 1.95 |
| Serie Rio Blanco (Hidrologia Antigua) | 1993 | 1.26 | 1.26 | 0.59 | 2.63 | 2.77 | 2.99 | 3.15 | 1.98 | 1.69 | 1.53 | 1.58 | 1.28 |
| Serie Rio Blanco (Hidrologia Antigua) | 1994 | 0.60 | 0.57 | 0.56 | 0.61 | 1.55 | 2.20 | 1.14 | 0.26 | 0.00 | 0.74 | 0.98 | 0.60 |
| Serie Rio Blanco (Hidrologia Antigua) | 1995 | 0.28 | 0.16 | 0.44 | 0.77 | 1.36 | 2.08 | 2.48 | 2.11 | 0.82 | 0.97 | 0.60 | 0.27 |
| Serie Rio Blanco (Hidrologia Antigua) | 1996 | 0.27 | 0.75 | 0.38 | 0.38 | 0.92 | 1.15 | 1.26 | 1.39 | 0.41 | 0.22 | 0.26 | 0.47 |
| Serie Rio Blanco (Hidrologia Antigua) | 1997 | 0.16 | 0.00 | 0.00 | 0.00 | 3.72 | 3.91 | 7.40 | 3.36 | 0.87 | 0.39 | 0.00 | 0.00 |
| Serie Rio Blanco (Hidrologia Antigua) | 1998 | 0.00 | 0.00 | 0.00 | 0.00 | 1.66 | 1.80 | 2.09 | 0.21 | 0.00 | 0.06 | 0.00 | 0.74 |
| Serie Rio Blanco (Hidrologia Antigua) | 1999 | 0.41 | 0.00 | 0.12 | 3.18 | 1.03 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 |
| Serie Rio Blanco (Hidrologia Antigua) | 2000 | 0.08 | 0.07 | 0.10 | 0.54 | 0.44 | 0.18 | 0.10 | 0.10 | 0.02 | 0.32 | 0.48 | 0.51 |

|                                       |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Rio Blanco (Hidrologia Antigua) | 2001 | 0.14 | 0.00 | 0.16 | 0.33 | 0.23 | 0.03 | 2.82 | 0.00 | 0.21 | 0.05 | 0.36 | 0.12 |
| Serie Rio Blanco (Hidrologia Antigua) | 2002 | 0.33 | 0.41 | 0.50 | 0.99 | 1.40 | 1.78 | 2.22 | 1.75 | 1.11 | 1.10 | 1.10 | 0.72 |
| Serie Rio Blanco (Hidrologia Antigua) | 2003 | 0.43 | 0.45 | 1.03 | 1.55 | 2.61 | 1.81 | 3.22 | 3.27 | 2.66 | 1.44 | 1.01 | 0.90 |
| Serie Rio Blanco (Hidrologia Antigua) | 2004 | 0.32 | 0.36 | 1.13 | 1.26 | 2.35 | 3.84 | 2.54 | 2.51 | 1.02 | 1.26 | 1.33 | 0.69 |
| Serie Rio Blanco (Hidrologia Antigua) | 2005 | 0.49 | 0.63 | 0.50 | 1.57 | 2.16 | 1.97 | 1.62 | 1.79 | 1.76 | 1.35 | 1.56 | 0.54 |
| Serie Rio Blanco (Hidrologia Antigua) | 2006 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Serie Rio Blanco (Hidrologia Antigua) | 2007 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Serie Rio Blanco (Hidrologia Antigua) | 2008 | 0.66 | 0.07 | 0.14 | 0.10 | 0.14 | 0.15 | 0.09 | 0.01 | 0.00 | 0.21 | 0.13 | 0.00 |
| Serie Sisga                           | 1944 | 0.39 | 0.23 | 0.31 | 1.55 | 5.43 | 4.73 | 4.73 | 2.02 | 1.32 | 1.16 | 1.24 | 0.39 |
| Serie Sisga                           | 1945 | 0.31 | 0.16 | 0.16 | 1.55 | 5.35 | 2.56 | 3.26 | 3.26 | 0.85 | 0.93 | 0.85 | 0.39 |
| Serie Sisga                           | 1946 | 0.39 | 0.16 | 0.23 | 0.39 | 1.63 | 2.79 | 5.82 | 7.22 | 1.94 | 0.62 | 0.54 | 0.47 |
| Serie Sisga                           | 1947 | 0.16 | 0.23 | 0.16 | 0.16 | 0.54 | 3.03 | 6.67 | 3.57 | 1.78 | 4.89 | 1.09 | 0.31 |
| Serie Sisga                           | 1948 | 0.23 | 0.23 | 0.16 | 0.78 | 1.55 | 2.64 | 3.57 | 1.94 | 1.47 | 0.70 | 1.94 | 0.54 |
| Serie Sisga                           | 1949 | 0.23 | 0.23 | 0.23 | 1.71 | 2.41 | 2.41 | 3.88 | 3.65 | 1.63 | 1.09 | 2.02 | 0.85 |
| Serie Sisga                           | 1950 | 0.47 | 0.62 | 1.47 | 0.47 | 3.18 | 3.18 | 3.65 | 2.48 | 1.24 | 1.78 | 1.86 | 1.40 |
| Serie Sisga                           | 1951 | 0.62 | 0.70 | 1.78 | 2.17 | 4.11 | 5.04 | 9.62 | 3.49 | 1.71 | 3.80 | 3.34 | 0.78 |
| Serie Sisga                           | 1952 | 0.47 | 0.39 | 0.31 | 2.33 | 2.48 | 3.73 | 6.60 | 4.27 | 1.78 | 1.32 | 3.41 | 1.40 |
| Serie Sisga                           | 1953 | 0.47 | 0.47 | 0.62 | 0.78 | 2.41 | 3.49 | 2.56 | 1.47 | 1.32 | 2.48 | 2.33 | 0.93 |
| Serie Sisga                           | 1954 | 0.47 | 0.39 | 0.31 | 1.09 | 2.33 | 3.96 | 4.89 | 3.65 | 1.32 | 4.04 | 2.56 | 1.09 |
| Serie Sisga                           | 1955 | 0.79 | 0.52 | 1.26 | 1.50 | 2.37 | 1.69 | 2.93 | 2.01 | 1.94 | 2.26 | 2.38 | 1.73 |
| Serie Sisga                           | 1956 | 1.47 | 0.94 | 1.78 | 0.97 | 1.28 | 4.00 | 3.60 | 4.88 | 2.88 | 5.39 | 2.01 | 1.29 |
| Serie Sisga                           | 1957 | 0.42 | 0.27 | 0.49 | 0.57 | 5.11 | 4.99 | 6.12 | 4.70 | 2.15 | 2.45 | 2.17 | 1.23 |
| Serie Sisga                           | 1958 | 0.44 | 0.23 | 0.33 | 0.55 | 1.33 | 2.13 | 5.25 | 3.57 | 1.80 | 0.78 | 1.06 | 0.45 |
| Serie Sisga                           | 1959 | 0.24 | 0.27 | 0.31 | 0.47 | 1.57 | 2.64 | 5.04 | 3.36 | 3.11 | 2.68 | 2.28 | 0.74 |
| Serie Sisga                           | 1960 | 0.43 | 0.34 | 0.27 | 0.49 | 1.02 | 1.75 | 3.41 | 6.01 | 3.52 | 1.30 | 0.96 | 1.23 |
| Serie Sisga                           | 1961 | 0.29 | 0.20 | 0.26 | 0.51 | 0.34 | 3.55 | 3.44 | 3.54 | 0.99 | 1.61 | 2.76 | 0.52 |
| Serie Sisga                           | 1962 | 0.25 | 0.21 | 0.31 | 0.25 | 1.56 | 2.90 | 5.04 | 3.27 | 1.52 | 1.36 | 1.51 | 0.70 |
| Serie Sisga                           | 1963 | 0.33 | 0.26 | 0.23 | 0.64 | 5.41 | 3.88 | 4.74 | 4.87 | 1.99 | 0.62 | 1.80 | 0.61 |
| Serie Sisga                           | 1964 | 0.23 | 0.19 | 0.20 | 0.33 | 1.22 | 3.18 | 3.52 | 1.98 | 1.99 | 1.09 | 1.55 | 0.74 |

|             |      |      |      |      |      |      |       |       |      |      |      |      |      |
|-------------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|
| Serie Sisga | 1965 | 0.34 | 0.22 | 0.26 | 1.44 | 4.17 | 3.87  | 7.94  | 5.63 | 1.61 | 2.62 | 3.08 | 1.08 |
| Serie Sisga | 1966 | 0.46 | 0.24 | 0.71 | 0.61 | 0.40 | 0.84  | 2.17  | 2.28 | 1.11 | 0.81 | 1.32 | 2.45 |
| Serie Sisga | 1967 | 0.47 | 0.21 | 0.32 | 1.51 | 3.30 | 6.39  | 5.52  | 9.04 | 2.55 | 1.07 | 1.75 | 1.04 |
| Serie Sisga | 1968 | 0.24 | 0.24 | 0.18 | 2.10 | 0.98 | 4.34  | 9.02  | 5.92 | 1.58 | 1.72 | 1.25 | 0.47 |
| Serie Sisga | 1969 | 0.67 | 0.37 | 0.14 | 1.12 | 2.34 | 2.14  | 5.94  | 3.19 | 0.95 | 4.65 | 2.41 | 0.68 |
| Serie Sisga | 1970 | 1.13 | 0.88 | 0.46 | 0.78 | 1.98 | 3.62  | 3.53  | 3.55 | 1.97 | 4.29 | 2.10 | 0.93 |
| Serie Sisga | 1971 | 0.72 | 0.47 | 0.56 | 1.42 | 3.35 | 3.12  | 5.18  | 2.65 | 1.90 | 0.99 | 1.20 | 0.71 |
| Serie Sisga | 1972 | 1.75 | 1.25 | 1.14 | 4.39 | 4.22 | 5.27  | 7.77  | 3.17 | 2.82 | 0.83 | 1.20 | 0.50 |
| Serie Sisga | 1973 | 0.38 | 0.29 | 0.23 | 0.31 | 1.47 | 1.31  | 2.97  | 3.31 | 4.58 | 1.83 | 2.47 | 1.30 |
| Serie Sisga | 1974 | 0.45 | 0.50 | 0.54 | 1.23 | 1.32 | 1.47  | 3.12  | 2.26 | 1.19 | 1.30 | 1.60 | 0.66 |
| Serie Sisga | 1975 | 0.35 | 0.39 | 0.64 | 0.47 | 0.88 | 3.54  | 1.68  | 2.99 | 1.72 | 1.68 | 2.05 | 2.10 |
| Serie Sisga | 1976 | 0.64 | 0.29 | 0.70 | 1.67 | 6.17 | 10.28 | 12.35 | 3.65 | 2.58 | 3.76 | 3.22 | 1.15 |
| Serie Sisga | 1977 | 0.25 | 0.15 | 0.15 | 0.69 | 0.91 | 2.40  | 3.93  | 2.94 | 4.14 | 1.40 | 3.26 | 0.39 |
| Serie Sisga | 1978 | 0.16 | 0.20 | 0.20 | 1.58 | 1.56 | 4.88  | 3.62  | 4.78 | 2.10 | 1.99 | 0.69 | 0.57 |
| Serie Sisga | 1979 | 0.42 | 0.36 | 0.42 | 1.42 | 2.16 | 5.38  | 3.03  | 3.69 | 1.54 | 4.94 | 5.35 | 3.00 |
| Serie Sisga | 1980 | 0.69 | 0.30 | 0.22 | 1.39 | 2.61 | 7.57  | 5.74  | 2.75 | 2.95 | 2.79 | 0.65 | 0.25 |
| Serie Sisga | 1981 | 0.21 | 0.18 | 0.22 | 2.81 | 5.73 | 3.13  | 1.63  | 1.58 | 1.30 | 1.71 | 1.21 | 0.49 |
| Serie Sisga | 1982 | 0.24 | 0.21 | 0.51 | 3.90 | 2.93 | 2.67  | 7.16  | 6.56 | 3.02 | 2.15 | 0.79 | 0.38 |
| Serie Sisga | 1983 | 0.30 | 0.72 | 1.04 | 1.85 | 1.66 | 1.93  | 5.47  | 4.14 | 1.42 | 1.64 | 0.52 | 0.35 |
| Serie Sisga | 1984 | 0.23 | 0.20 | 0.19 | 0.60 | 2.05 | 7.15  | 2.78  | 3.35 | 2.23 | 0.61 | 1.06 | 0.36 |
| Serie Sisga | 1985 | 0.48 | 0.24 | 0.37 | 0.86 | 2.11 | 6.82  | 3.53  | 2.32 | 2.57 | 2.02 | 3.27 | 1.90 |
| Serie Sisga | 1986 | 0.27 | 0.77 | 1.28 | 0.90 | 1.51 | 8.93  | 10.83 | 4.56 | 1.35 | 3.57 | 1.54 | 0.55 |
| Serie Sisga | 1987 | 0.29 | 0.28 | 0.24 | 0.69 | 2.13 | 1.87  | 7.58  | 2.53 | 1.37 | 1.38 | 0.97 | 0.75 |
| Serie Sisga | 1988 | 0.31 | 0.24 | 0.21 | 0.25 | 0.95 | 1.95  | 4.58  | 1.11 | 0.95 | 1.59 | 2.19 | 0.99 |
| Serie Sisga | 1989 | 0.28 | 0.28 | 0.99 | 0.95 | 4.56 | 4.44  | 6.51  | 1.52 | 0.83 | 0.53 | 0.52 | 0.44 |
| Serie Sisga | 1990 | 0.24 | 0.27 | 0.71 | 0.95 | 7.39 | 5.92  | 3.79  | 4.00 | 0.71 | 1.41 | 1.24 | 0.91 |
| Serie Sisga | 1991 | 0.42 | 0.32 | 0.83 | 0.90 | 1.05 | 1.91  | 9.19  | 7.95 | 1.95 | 1.14 | 1.29 | 0.36 |
| Serie Sisga | 1992 | 0.28 | 0.23 | 0.20 | 0.47 | 0.61 | 2.11  | 8.00  | 4.59 | 1.76 | 0.68 | 2.22 | 0.56 |
| Serie Sisga | 1993 | 0.36 | 0.26 | 0.34 | 0.47 | 2.25 | 6.97  | 5.80  | 2.28 | 1.73 | 0.68 | 1.13 | 0.71 |
| Serie Sisga | 1994 | 0.27 | 0.23 | 0.29 | 0.36 | 3.02 | 3.55  | 8.14  | 5.42 | 3.24 | 4.12 | 1.58 | 0.60 |
| Serie Sisga | 1995 | 0.33 | 0.25 | 0.30 | 0.55 | 1.61 | 2.46  | 2.78  | 1.90 | 0.97 | 0.67 | 0.63 | 0.66 |
| Serie Sisga | 1996 | 0.41 | 1.24 | 1.95 | 0.83 | 3.04 | 4.11  | 6.77  | 3.62 | 1.14 | 2.13 | 0.61 | 0.55 |
| Serie Sisga | 1997 | 0.72 | 0.49 | 0.34 | 0.65 | 1.85 | 2.14  | 12.69 | 5.46 | 0.73 | 0.40 | 0.29 | 0.27 |
| Serie Sisga | 1998 | 0.22 | 0.19 | 0.18 | 0.25 | 3.84 | 6.35  | 6.47  | 1.92 | 0.52 | 0.73 | 0.59 | 1.15 |
| Serie Sisga | 1999 | 0.29 | 0.37 | 0.64 | 1.94 | 1.22 | 1.80  | 1.38  | 1.87 | 2.38 | 3.04 | 1.84 | 0.46 |
| Serie Sisga | 2000 | 0.34 | 0.31 | 0.60 | 1.11 | 2.25 | 3.01  | 4.28  | 4.74 | 2.85 | 1.51 | 1.63 | 0.47 |
| Serie Sisga | 2001 | 0.37 | 0.32 | 0.36 | 0.31 | 0.95 | 3.06  | 2.63  | 6.14 | 3.52 | 0.98 | 1.18 | 0.90 |
| Serie Sisga | 2002 | 0.30 | 0.29 | 0.40 | 1.90 | 4.10 | 11.66 | 6.23  | 8.46 | 1.22 | 0.59 | 0.79 | 0.29 |
| Serie Sisga | 2003 | 0.25 | 0.24 | 0.80 | 0.97 | 3.26 | 1.53  | 4.14  | 2.81 | 1.69 | 1.67 | 1.01 | 0.58 |
| Serie Sisga | 2004 | 0.30 | 0.26 | 0.32 | 1.61 | 3.95 | 7.39  | 3.51  | 6.32 | 1.64 | 1.38 | 0.94 | 0.40 |
| Serie Sisga | 2005 | 0.31 | 0.32 | 0.24 | 0.77 | 3.42 | 1.80  | 1.22  | 2.82 | 3.25 | 2.45 | 2.68 | 0.40 |
| Serie Sisga | 2006 | 0.29 | 0.25 | 0.54 | 4.53 | 3.92 | 5.81  | 6.33  | 1.94 | 0.80 | 2.31 | 1.21 | 0.56 |
| Serie Sisga | 2007 | 0.29 | 0.25 | 0.21 | 0.60 | 1.55 | 4.63  | 3.10  | 2.80 | 1.70 | 1.92 | 1.18 | 0.41 |
| Serie Sisga | 2008 | 0.45 | 0.27 | 0.25 | 0.46 | 2.82 | 5.10  | 5.83  | 2.86 | 2.02 | 2.13 | 4.40 | 1.28 |

|                                          |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1947 | 0.89 | 0.41 | 0.29 | 0.26 | 0.85 | 2.81 | 5.24 | 3.08 | 2.58 | 3.17 | 3.20 | 0.86 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1948 | 0.12 | 0.28 | 0.30 | 3.67 | 2.98 | 4.01 | 3.94 | 2.58 | 1.10 | 2.10 | 3.81 | 1.05 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1949 | 0.21 | 0.30 | 0.75 | 1.35 | 3.55 | 3.21 | 5.75 | 2.68 | 1.56 | 2.48 | 3.61 | 1.52 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1950 | 0.81 | 2.80 | 2.62 | 1.59 | 6.38 | 4.56 | 5.40 | 3.19 | 1.51 | 2.65 | 3.93 | 2.64 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1951 | 0.44 | 1.33 | 6.18 | 2.96 | 7.14 | 4.19 | 6.94 | 3.39 | 1.34 | 3.07 | 6.01 | 1.47 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1952 | 0.77 | 0.72 | 1.28 | 2.37 | 6.72 | 3.98 | 9.22 | 5.07 | 2.11 | 2.44 | 8.02 | 4.12 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1953 | 0.35 | 0.41 | 0.39 | 0.56 | 3.99 | 3.91 | 4.94 | 3.70 | 1.48 | 4.15 | 4.32 | 2.28 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1954 | 0.35 | 0.35 | 0.22 | 2.85 | 3.94 | 4.73 | 7.53 | 5.44 | 3.35 | 4.57 | 6.44 | 3.42 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1955 | 0.88 | 0.70 | 1.61 | 3.06 | 3.68 | 3.63 | 6.35 | 2.18 | 2.74 | 4.57 | 5.71 | 3.07 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1956 | 4.02 | 2.04 | 4.20 | 1.31 | 1.84 | 5.95 | 4.28 | 4.08 | 3.91 | 6.06 | 3.60 | 7.26 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1957 | 1.08 | 0.40 | 3.02 | 1.40 | 8.96 | 4.14 | 6.08 | 3.50 | 2.31 | 4.48 | 5.54 | 3.50 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1958 | 0.22 | 0.30 | 0.28 | 0.26 | 1.26 | 1.67 | 2.98 | 2.77 | 0.92 | 2.30 | 4.21 | 1.11 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1959 | 0.11 | 0.15 | 0.13 | 0.11 | 1.59 | 2.47 | 7.37 | 2.60 | 3.45 | 2.79 | 3.78 | 1.17 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1960 | 0.16 | 0.60 | 0.74 | 0.48 | 1.19 | 2.36 | 3.36 | 4.52 | 2.13 | 2.04 | 3.04 | 2.04 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1961 | 0.06 | 0.28 | 0.63 | 1.09 | 1.03 | 3.40 | 4.88 | 4.19 | 1.31 | 3.91 | 5.88 | 1.14 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1962 | 0.09 | 0.22 | 0.42 | 0.46 | 2.97 | 5.79 | 5.89 | 4.28 | 1.66 | 2.65 | 5.37 | 1.27 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1963 | 0.64 | 0.96 | 0.33 | 2.09 | 8.89 | 4.80 | 5.54 | 3.54 | 1.61 | 2.03 | 5.23 | 1.19 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1964 | 0.09 | 0.17 | 0.08 | 0.35 | 0.89 | 4.32 | 8.73 | 3.46 | 0.92 | 1.79 | 0.82 | 3.07 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1965 | 0.56 | 0.04 | 0.05 | 1.69 | 4.38 | 2.85 | 4.71 | 2.61 | 0.82 | 2.98 | 6.23 | 1.65 |

|                                          |      |      |      |      |       |      |      |      |      |      |      |       |      |
|------------------------------------------|------|------|------|------|-------|------|------|------|------|------|------|-------|------|
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1966 | 0.11 | 0.12 | 1.01 | 0.95  | 0.27 | 0.45 | 2.09 | 2.69 | 1.42 | 2.02 | 5.42  | 8.34 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1967 | 0.82 | 0.23 | 1.79 | 3.69  | 5.97 | 9.13 | 6.23 | 5.94 | 1.60 | 1.45 | 6.21  | 2.92 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1968 | 0.65 | 0.90 | 0.43 | 4.34  | 2.32 | 6.09 | 7.78 | 4.75 | 1.78 | 3.44 | 4.87  | 1.26 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1969 | 2.37 | 0.76 | 0.16 | 3.19  | 3.55 | 2.80 | 5.12 | 3.78 | 1.50 | 9.58 | 6.98  | 1.68 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1970 | 0.86 | 0.88 | 0.54 | 0.54  | 1.35 | 3.35 | 3.66 | 3.36 | 2.04 | 7.16 | 6.98  | 1.66 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1971 | 0.72 | 0.66 | 1.11 | 5.05  | 5.63 | 4.30 | 5.89 | 3.58 | 4.81 | 3.30 | 3.60  | 1.85 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1972 | 3.21 | 1.44 | 1.34 | 4.00  | 8.09 | 6.63 | 7.22 | 2.49 | 1.87 | 2.28 | 4.89  | 0.80 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1973 | 0.21 | 0.12 | 0.16 | 0.18  | 0.82 | 1.60 | 1.65 | 1.93 | 4.95 | 4.59 | 3.78  | 7.89 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1974 | 0.89 | 1.77 | 2.12 | 2.15  | 3.57 | 1.68 | 2.87 | 1.93 | 1.43 | 2.31 | 4.12  | 1.18 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1975 | 0.22 | 0.66 | 0.90 | 0.66  | 2.68 | 4.38 | 2.56 | 3.72 | 2.87 | 1.61 | 5.19  | 6.07 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1976 | 2.16 | 0.74 | 1.17 | 5.41  | 7.11 | 6.23 | 8.63 | 3.22 | 3.21 | 8.49 | 6.96  | 2.40 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1977 | 0.47 | 0.24 | 0.23 | 0.84  | 1.53 | 2.67 | 3.34 | 3.09 | 3.09 | 3.87 | 4.50  | 0.51 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1978 | 0.25 | 0.72 | 0.60 | 1.60  | 2.50 | 3.30 | 1.25 | 1.36 | 2.10 | 2.50 | 1.72  | 0.90 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1979 | 0.51 | 0.57 | 0.72 | 1.74  | 1.79 | 4.96 | 2.13 | 2.07 | 1.40 | 9.19 | 10.13 | 4.28 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1980 | 0.98 | 1.02 | 0.85 | 1.60  | 0.94 | 4.10 | 2.18 | 1.61 | 1.33 | 1.65 | 1.56  | 0.77 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1981 | 0.58 | 0.43 | 0.46 | 1.86  | 4.32 | 4.08 | 8.11 | 3.71 | 3.81 | 4.71 | 3.90  | 1.97 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1982 | 3.28 | 1.61 | 2.22 | 8.31  | 7.60 | 4.35 | 7.73 | 6.08 | 3.99 | 3.00 | 4.98  | 2.64 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1983 | 0.86 | 1.83 | 1.74 | 10.00 | 3.38 | 3.04 | 4.49 | 1.77 | 0.12 | 1.49 | 2.13  | 1.74 |
| Serie Teusaca<br>(Hidrologia<br>Antigua) | 1984 | 0.95 | 0.79 | 0.49 | 0.46  | 1.12 | 5.85 | 2.88 | 2.89 | 2.23 | 0.78 | 11.19 | 0.37 |

|                                    |      |      |      |      |      |      |       |       |      |      |      |      |      |
|------------------------------------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|
| Serie Teusaca (Hidrologia Antigua) | 1985 | 0.28 | 0.08 | 0.09 | 0.00 | 1.63 | 16.30 | 5.47  | 4.93 | 3.51 | 5.76 | 0.63 | 5.10 |
| Serie Teusaca (Hidrologia Antigua) | 1986 | 1.34 | 1.15 | 2.67 | 0.00 | 0.00 | 0.07  | 2.78  | 1.18 | 0.34 | 0.70 | 0.45 | 0.45 |
| Serie Teusaca (Hidrologia Antigua) | 1987 | 0.44 | 0.34 | 0.72 | 0.00 | 0.00 | 0.29  | 4.23  | 2.86 | 1.27 | 2.96 | 3.23 | 2.02 |
| Serie Teusaca (Hidrologia Antigua) | 1988 | 0.95 | 0.52 | 0.54 | 0.00 | 0.59 | 2.00  | 10.43 | 6.13 | 1.96 | 2.52 | 3.10 | 0.00 |
| Serie Teusaca (Hidrologia Antigua) | 1989 | 0.48 | 0.94 | 1.40 | 2.31 | 2.31 | 1.86  | 2.34  | 1.78 | 1.66 | 1.74 | 2.21 | 2.18 |
| Serie Teusaca (Hidrologia Antigua) | 1990 | 0.00 | 0.00 | 2.04 | 1.91 | 4.55 | 2.60  | 2.53  | 2.66 | 1.44 | 1.83 | 2.07 | 1.85 |
| Serie Teusaca (Hidrologia Antigua) | 1991 | 2.05 | 1.84 | 1.68 | 2.09 | 1.84 | 2.30  | 4.53  | 8.44 | 2.27 | 1.45 | 3.49 | 1.73 |
| Serie Teusaca (Hidrologia Antigua) | 1992 | 1.40 | 1.63 | 1.98 | 2.15 | 1.55 | 1.93  | 7.54  | 2.07 | 0.68 | 1.01 | 1.83 | 1.94 |
| Serie Teusaca (Hidrologia Antigua) | 1993 | 1.12 | 1.00 | 0.80 | 1.60 | 2.61 | 4.12  | 5.19  | 6.22 | 3.40 | 2.39 | 3.46 | 1.96 |
| Serie Teusaca (Hidrologia Antigua) | 1994 | 0.92 | 0.83 | 0.78 | 1.10 | 3.51 | 3.09  | 8.63  | 7.33 | 3.64 | 4.76 | 2.77 | 1.41 |
| Serie Teusaca (Hidrologia Antigua) | 1995 | 0.52 | 0.45 | 0.49 | 1.02 | 1.92 | 2.76  | 1.97  | 1.92 | 1.29 | 1.48 | 1.39 | 0.90 |
| Serie Teusaca (Hidrologia Antigua) | 1996 | 0.50 | 0.52 | 0.69 | 0.68 | 1.76 | 2.49  | 4.98  | 1.97 | 1.31 | 2.15 | 1.96 | 2.80 |
| Serie Teusaca (Hidrologia Antigua) | 1997 | 4.77 | 4.95 | 3.33 | 0.57 | 0.69 | 0.57  | 3.79  | 2.36 | 0.88 | 0.47 | 0.53 | 0.53 |
| Serie Teusaca (Hidrologia Antigua) | 1998 | 0.57 | 0.83 | 1.17 | 1.11 | 2.57 | 2.46  | 10.31 | 4.01 | 0.71 | 1.34 | 1.13 | 5.56 |
| Serie Teusaca (Hidrologia Antigua) | 1999 | 3.51 | 2.60 | 3.03 | 5.32 | 5.82 | 5.59  | 9.49  | 4.94 | 4.20 | 4.84 | 4.92 | 3.83 |
| Serie Teusaca (Hidrologia Antigua) | 2000 | 3.33 | 3.38 | 2.17 | 2.60 | 4.42 | 5.33  | 4.31  | 4.90 | 6.62 | 2.20 | 3.94 | 1.03 |
| Serie Teusaca (Hidrologia Antigua) | 2001 | 0.41 | 0.47 | 0.82 | 0.40 | 1.23 | 2.37  | 3.45  | 1.52 | 3.03 | 1.70 | 3.87 | 2.21 |
| Serie Teusaca (Hidrologia Antigua) | 2002 | 0.91 | 0.93 | 1.34 | 1.82 | 2.26 | 3.52  | 2.75  | 3.82 | 1.77 | 1.25 | 2.38 | 1.60 |
| Serie Teusaca (Hidrologia Antigua) | 2003 | 0.53 | 0.52 | 0.68 | 1.90 | 2.98 | 1.71  | 3.91  | 3.33 | 1.76 | 2.18 | 2.27 | 2.58 |

|                                    |      |      |      |      |      |       |      |       |      |      |      |      |      |
|------------------------------------|------|------|------|------|------|-------|------|-------|------|------|------|------|------|
| Serie Teusaca (Hidrologia Antigua) | 2004 | 0.85 | 1.35 | 1.29 | 2.19 | 5.27  | 8.28 | 3.15  | 5.56 | 2.96 | 4.32 | 4.41 | 1.90 |
| Serie Teusaca (Hidrologia Antigua) | 2005 | 0.86 | 1.08 | 0.45 | 2.16 | 4.49  | 3.39 | 2.10  | 3.48 | 2.91 | 5.03 | 6.52 | 2.61 |
| Serie Teusaca (Hidrologia Antigua) | 2006 | 1.31 | 0.83 | 2.18 | 4.75 | 5.51  | 5.89 | 5.02  | 2.28 | 1.46 | 2.67 | 5.25 | 2.08 |
| Serie Teusaca (Hidrologia Antigua) | 2007 | 0.19 | 0.17 | 0.38 | 1.81 | 1.35  | 3.28 | 2.84  | 3.07 | 1.99 | 4.32 | 3.81 | 2.59 |
| Serie Teusaca (Hidrologia Antigua) | 2008 | 0.67 | 0.34 | 1.09 | 1.24 | 3.41  | 4.83 | 8.42  | 5.30 | 3.47 | 3.12 | 7.65 | 5.71 |
| Serie Tomine (Hidrologia Antigua)  | 1947 | 0.80 | 0.53 | 0.34 | 0.85 | 0.91  | 4.36 | 6.48  | 4.56 | 2.98 | 5.62 | 1.35 | 0.80 |
| Serie Tomine (Hidrologia Antigua)  | 1948 | 0.70 | 0.69 | 0.54 | 2.53 | 3.03  | 4.33 | 3.90  | 3.08 | 1.89 | 1.19 | 2.37 | 1.09 |
| Serie Tomine (Hidrologia Antigua)  | 1949 | 0.88 | 0.85 | 0.96 | 2.37 | 4.35  | 5.72 | 7.95  | 5.12 | 3.30 | 3.27 | 3.52 | 2.14 |
| Serie Tomine (Hidrologia Antigua)  | 1950 | 1.11 | 0.95 | 4.13 | 1.98 | 4.98  | 4.50 | 8.21  | 4.42 | 3.04 | 3.42 | 2.46 | 2.13 |
| Serie Tomine (Hidrologia Antigua)  | 1951 | 1.09 | 1.73 | 3.38 | 3.19 | 7.87  | 7.69 | 10.16 | 6.60 | 2.76 | 2.84 | 3.94 | 0.80 |
| Serie Tomine (Hidrologia Antigua)  | 1952 | 0.80 | 0.79 | 0.70 | 3.54 | 6.61  | 4.85 | 10.03 | 6.87 | 2.49 | 1.34 | 3.68 | 2.19 |
| Serie Tomine (Hidrologia Antigua)  | 1953 | 0.51 | 0.43 | 1.26 | 1.67 | 4.71  | 4.96 | 5.53  | 5.26 | 2.36 | 2.85 | 2.16 | 1.75 |
| Serie Tomine (Hidrologia Antigua)  | 1954 | 0.66 | 0.56 | 0.54 | 1.98 | 4.41  | 4.22 | 9.74  | 6.82 | 2.27 | 7.93 | 5.25 | 1.69 |
| Serie Tomine (Hidrologia Antigua)  | 1955 | 1.93 | 0.81 | 2.56 | 3.07 | 3.74  | 3.34 | 10.16 | 3.72 | 4.90 | 7.46 | 5.80 | 3.29 |
| Serie Tomine (Hidrologia Antigua)  | 1956 | 3.35 | 1.09 | 2.33 | 1.26 | 4.68  | 9.76 | 8.41  | 6.67 | 5.14 | 6.35 | 2.93 | 2.90 |
| Serie Tomine (Hidrologia Antigua)  | 1957 | 0.70 | 0.33 | 2.76 | 3.20 | 10.08 | 7.33 | 9.69  | 7.54 | 3.86 | 3.76 | 3.00 | 1.76 |
| Serie Tomine (Hidrologia Antigua)  | 1958 | 0.49 | 0.26 | 1.14 | 0.73 | 2.90  | 3.15 | 6.30  | 5.11 | 1.61 | 0.88 | 1.00 | 0.47 |
| Serie Tomine (Hidrologia Antigua)  | 1959 | 0.29 | 0.17 | 0.21 | 0.56 | 2.70  | 4.55 | 10.53 | 5.16 | 5.98 | 5.52 | 4.46 | 1.66 |
| Serie Tomine (Hidrologia Antigua)  | 1960 | 0.92 | 0.79 | 0.80 | 2.08 | 2.69  | 4.36 | 6.65  | 5.93 | 2.92 | 1.63 | 1.18 | 2.76 |

|                                         |      |      |      |      |      |       |       |       |       |      |       |       |      |
|-----------------------------------------|------|------|------|------|------|-------|-------|-------|-------|------|-------|-------|------|
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1961 | 0.60 | 0.54 | 0.71 | 3.12 | 1.57  | 7.93  | 8.23  | 7.10  | 2.34 | 3.84  | 3.32  | 0.80 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1962 | 0.40 | 0.38 | 0.89 | 0.99 | 4.31  | 7.23  | 8.87  | 7.44  | 4.54 | 3.71  | 4.39  | 1.96 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1963 | 0.00 | 0.69 | 0.10 | 3.10 | 10.63 | 7.02  | 7.14  | 6.03  | 2.95 | 2.58  | 5.22  | 2.33 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1964 | 0.00 | 0.00 | 0.00 | 1.87 | 5.53  | 8.49  | 6.42  | 3.90  | 2.61 | 2.30  | 1.58  | 2.29 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1965 | 0.46 | 0.00 | 0.00 | 4.62 | 9.44  | 6.99  | 14.11 | 8.98  | 1.38 | 3.59  | 6.33  | 0.44 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1966 | 0.70 | 1.06 | 3.67 | 1.99 | 1.82  | 2.35  | 5.58  | 5.72  | 2.69 | 2.03  | 6.05  | 6.47 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1967 | 1.16 | 0.46 | 2.70 | 4.21 | 6.21  | 11.61 | 9.17  | 11.19 | 2.84 | 3.35  | 4.93  | 2.75 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1968 | 0.00 | 0.89 | 0.00 | 7.06 | 2.68  | 11.31 | 16.14 | 8.64  | 2.53 | 4.90  | 2.56  | 0.00 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1969 | 0.48 | 0.00 | 0.00 | 4.10 | 2.96  | 3.72  | 3.35  | 4.38  | 1.73 | 10.00 | 2.44  | 0.50 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1970 | 0.76 | 2.13 | 1.18 | 0.69 | 3.04  | 9.55  | 6.18  | 5.75  | 5.30 | 8.59  | 7.29  | 0.13 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1971 | 0.76 | 0.11 | 1.63 | 5.36 | 6.50  | 7.18  | 9.23  | 4.88  | 5.28 | 1.40  | 1.10  | 0.53 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1972 | 3.21 | 0.00 | 1.39 | 9.90 | 11.81 | 11.43 | 18.34 | 5.83  | 3.68 | 2.85  | 3.07  | 1.30 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1973 | 1.60 | 2.18 | 2.97 | 3.58 | 4.56  | 6.03  | 5.60  | 3.30  | 7.82 | 5.15  | 6.26  | 5.27 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1974 | 0.46 | 0.61 | 1.98 | 4.03 | 6.88  | 3.88  | 8.88  | 5.67  | 3.00 | 3.39  | 3.38  | 0.43 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1975 | 0.00 | 0.24 | 1.10 | 0.99 | 3.97  | 11.28 | 3.05  | 6.45  | 5.59 | 5.29  | 3.29  | 6.80 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1976 | 0.63 | 0.69 | 2.56 | 7.32 | 7.71  | 13.48 | 17.94 | 5.91  | 2.98 | 6.68  | 6.13  | 1.17 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1977 | 0.00 | 0.00 | 0.71 | 3.46 | 2.23  | 4.92  | 8.32  | 3.91  | 4.48 | 2.34  | 2.74  | 0.01 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1978 | 0.00 | 0.36 | 0.75 | 4.66 | 2.80  | 8.22  | 6.03  | 3.83  | 2.67 | 2.50  | 0.96  | 0.21 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1979 | 0.01 | 0.20 | 1.76 | 4.93 | 5.22  | 11.86 | 4.49  | 4.22  | 2.06 | 15.02 | 12.05 | 3.26 |

|                                         |      |      |      |      |       |       |       |       |      |      |      |      |      |
|-----------------------------------------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1980 | 0.46 | 0.01 | 0.20 | 3.34  | 2.84  | 10.50 | 5.96  | 3.61 | 2.84 | 4.67 | 1.66 | 0.27 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1981 | 0.53 | 0.53 | 1.89 | 8.44  | 13.91 | 5.01  | 4.77  | 4.22 | 5.54 | 5.79 | 4.30 | 0.74 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1982 | 0.87 | 1.14 | 2.76 | 10.18 | 8.45  | 3.54  | 9.66  | 6.76 | 4.57 | 3.95 | 1.80 | 0.92 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1983 | 1.39 | 1.20 | 3.21 | 6.00  | 3.23  | 4.23  | 8.39  | 6.21 | 3.20 | 2.32 | 0.91 | 1.11 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1984 | 1.07 | 1.04 | 0.87 | 0.72  | 3.17  | 10.42 | 4.75  | 8.04 | 6.33 | 1.96 | 6.34 | 0.15 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1985 | 0.17 | 0.03 | 0.00 | 2.42  | 6.80  | 9.96  | 7.04  | 5.36 | 4.12 | 6.40 | 5.47 | 2.11 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1986 | 0.63 | 3.94 | 5.02 | 1.58  | 2.82  | 13.45 | 11.24 | 5.44 | 2.16 | 5.94 | 3.38 | 1.00 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1987 | 0.00 | 0.23 | 0.33 | 1.52  | 3.29  | 3.30  | 8.79  | 4.73 | 2.01 | 6.62 | 3.25 | 0.92 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1988 | 0.00 | 0.00 | 0.00 | 0.00  | 0.80  | 3.49  | 9.05  | 2.75 | 3.04 | 3.85 | 6.18 | 4.16 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1989 | 0.00 | 0.00 | 4.39 | 1.89  | 4.22  | 8.39  | 8.04  | 2.49 | 0.72 | 0.00 | 1.03 | 0.65 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1990 | 0.00 | 1.07 | 1.10 | 1.29  | 9.61  | 7.65  | 4.52  | 4.58 | 0.24 | 1.92 | 1.72 | 1.68 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1991 | 0.00 | 0.00 | 0.78 | 1.28  | 0.97  | 2.04  | 11.75 | 9.07 | 2.57 | 1.09 | 3.88 | 0.00 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1992 | 0.00 | 0.00 | 1.45 | 2.68  | 1.49  | 1.62  | 8.79  | 4.06 | 2.30 | 1.32 | 4.16 | 2.33 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1993 | 0.45 | 0.04 | 0.00 | 0.90  | 5.11  | 7.94  | 9.14  | 5.19 | 2.87 | 1.66 | 2.12 | 0.43 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1994 | 0.56 | 0.50 | 1.02 | 0.78  | 4.76  | 7.07  | 14.96 | 7.54 | 5.42 | 9.74 | 2.89 | 1.30 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1995 | 0.69 | 0.67 | 1.07 | 1.43  | 3.48  | 4.19  | 4.13  | 5.16 | 1.27 | 1.44 | 1.16 | 1.72 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1996 | 4.07 | 2.83 | 5.03 | 3.20  | 5.28  | 4.60  | 12.51 | 4.79 | 0.45 | 3.56 | 1.96 | 1.40 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1997 | 3.03 | 0.77 | 0.35 | 1.32  | 4.05  | 3.05  | 17.94 | 5.00 | 2.45 | 1.32 | 1.54 | 0.69 |
| Serie Tomine<br>(Hidrologia<br>Antigua) | 1998 | 0.21 | 0.89 | 0.83 | 0.79  | 7.08  | 9.82  | 11.26 | 1.31 | 3.64 | 1.75 | 2.68 | 2.85 |

|                                   |      |      |      |      |      |       |       |       |       |      |      |       |      |
|-----------------------------------|------|------|------|------|------|-------|-------|-------|-------|------|------|-------|------|
| Serie Tomine (Hidrologia Antigua) | 1999 | 1.26 | 2.51 | 2.58 | 5.18 | 2.64  | 5.08  | 3.04  | 4.83  | 5.39 | 9.59 | 5.93  | 2.16 |
| Serie Tomine (Hidrologia Antigua) | 2000 | 1.63 | 1.34 | 1.78 | 3.45 | 4.20  | 6.16  | 7.45  | 6.02  | 5.42 | 3.60 | 4.52  | 2.14 |
| Serie Tomine (Hidrologia Antigua) | 2001 | 1.01 | 0.88 | 1.57 | 3.38 | 4.85  | 7.27  | 8.82  | 5.81  | 3.56 | 4.04 | 3.67  | 2.07 |
| Serie Tomine (Hidrologia Antigua) | 2002 | 0.71 | 0.78 | 1.07 | 3.07 | 6.66  | 16.84 | 13.11 | 14.97 | 2.47 | 1.61 | 2.73  | 0.57 |
| Serie Tomine (Hidrologia Antigua) | 2003 | 0.58 | 1.91 | 1.82 | 3.06 | 6.05  | 3.14  | 6.75  | 5.09  | 3.54 | 3.86 | 2.95  | 1.88 |
| Serie Tomine (Hidrologia Antigua) | 2004 | 1.59 | 2.10 | 2.63 | 3.84 | 7.78  | 15.87 | 5.89  | 7.68  | 4.62 | 4.87 | 4.73  | 2.41 |
| Serie Tomine (Hidrologia Antigua) | 2005 | 0.97 | 1.38 | 0.97 | 4.27 | 7.52  | 5.02  | 3.61  | 5.42  | 4.87 | 6.05 | 9.82  | 1.03 |
| Serie Tomine (Hidrologia Antigua) | 2006 | 0.00 | 0.00 | 2.44 | 7.75 | 13.43 | 9.38  | 8.45  | 4.04  | 1.87 | 5.18 | 5.03  | 1.01 |
| Serie Tomine (Hidrologia Antigua) | 2007 | 0.00 | 0.00 | 0.00 | 1.59 | 1.67  | 7.55  | 4.53  | 4.90  | 2.64 | 3.59 | 2.21  | 2.11 |
| Serie Tomine (Hidrologia Antigua) | 2008 | 0.95 | 1.33 | 0.92 | 1.74 | 6.20  | 7.55  | 10.42 | 6.30  | 4.51 | 3.40 | 10.07 | 3.21 |

## Formato 5. Embalses

| Nombre  | Mínimo Técnico (Mm3) | Máximo Técnico (Mm3) |
|---------|----------------------|----------------------|
| Betania | 511.86               | 1,362.38             |
| Chuza   | 12.50                | 239.40               |
| Guavio  | 21.00                | 795.11               |
| Muna    | 5.08                 | 19.05                |
| Neusa   | 0.00                 | 117.48               |
| Sisga   | 0.00                 | 90.12                |
| Tomine  | 0.00                 | 674.96               |

## Formato 6. Filtraciones

Formato No Registrado

## Formato 7. Curvas de Operación Embalses

| Embalse | Mes | Volumen Espera (Mm3) | Curva Guía Mínima (Mm3) | Curva Guía Máxima (Mm3) |
|---------|-----|----------------------|-------------------------|-------------------------|
| Chuza   | 1   |                      | 100.00                  |                         |
| Chuza   | 2   |                      | 70.00                   |                         |
| Chuza   | 3   |                      | 45.00                   |                         |
| Chuza   | 4   |                      | 40.00                   |                         |
| Chuza   | 5   |                      | 55.00                   |                         |
| Chuza   | 6   |                      | 90.00                   |                         |
| Chuza   | 7   |                      | 120.00                  |                         |
| Chuza   | 8   |                      | 140.00                  |                         |
| Chuza   | 9   |                      | 150.00                  |                         |
| Chuza   | 10  |                      | 160.00                  |                         |
| Chuza   | 11  |                      | 145.00                  |                         |
| Chuza   | 12  |                      | 130.00                  |                         |
| Neusa   | 1   |                      | 57.00                   |                         |
| Neusa   | 2   |                      | 49.00                   |                         |
| Neusa   | 3   |                      | 42.00                   |                         |
| Neusa   | 4   |                      | 42.00                   |                         |
| Neusa   | 5   |                      | 44.00                   |                         |
| Neusa   | 6   |                      | 51.00                   |                         |
| Neusa   | 7   |                      | 62.00                   |                         |
| Neusa   | 8   |                      | 66.00                   |                         |
| Neusa   | 9   |                      | 67.00                   |                         |
| Neusa   | 10  |                      | 67.00                   |                         |
| Neusa   | 11  |                      | 70.00                   |                         |
| Neusa   | 12  |                      | 64.00                   |                         |
| Sisga   | 1   |                      | 23.00                   |                         |
| Sisga   | 2   |                      | 19.00                   |                         |
| Sisga   | 3   |                      | 18.00                   |                         |
| Sisga   | 4   |                      | 18.00                   |                         |
| Sisga   | 5   |                      | 18.00                   |                         |
| Sisga   | 6   |                      | 20.00                   |                         |
| Sisga   | 7   |                      | 25.00                   |                         |
| Sisga   | 8   |                      | 26.00                   |                         |
| Sisga   | 9   |                      | 27.00                   |                         |
| Sisga   | 10  |                      | 27.00                   |                         |
| Sisga   | 11  |                      | 31.00                   |                         |
| Sisga   | 12  |                      | 26.00                   |                         |
| Tomine  | 1   |                      | 70.00                   |                         |

|        |    |  |        |  |
|--------|----|--|--------|--|
| Tomine | 2  |  | 40.00  |  |
| Tomine | 3  |  | 10.00  |  |
| Tomine | 4  |  | 10.00  |  |
| Tomine | 5  |  | 10.00  |  |
| Tomine | 6  |  | 50.00  |  |
| Tomine | 7  |  | 80.00  |  |
| Tomine | 8  |  | 100.00 |  |
| Tomine | 9  |  | 110.00 |  |
| Tomine | 10 |  | 110.00 |  |
| Tomine | 11 |  | 120.00 |  |
| Tomine | 12 |  | 90.00  |  |

### Formato 8. Capacidad Arcos de Descarga

| Nombre                                                      | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) | Fecha Entrada | Fecha Salida |
|-------------------------------------------------------------|---------------------|---------------------|---------------|--------------|
| Compuerta Espino                                            | 0.00                | 80.00               | 2007-04-01    | 2100-12-01   |
| Descarga Chuza                                              | 0.00                | 13.50               | 2004-10-01    | 2100-12-01   |
| Descarga Neusa                                              | 0.50                | 4.50                | 2008-02-01    | 2100-12-01   |
| Descarga Rio Bogota entre Espino y Alicachin a Embalse Muna | 0.00                | 60.50               | 1985-04-01    | 2100-12-01   |
| Descarga Sisga                                              | 0.00                | 12.00               | 2008-02-01    | 2100-12-01   |
| Descarga Tomine                                             | 0.00                | 15.00               | 2004-10-01    | 2100-12-01   |
| Desviacion Rio Blanco                                       | 0.00                | 8.00                | 2001-01-01    | 2100-12-01   |
| Rio Bogota entre Achury y Espino                            | 0.00                | 80.00               | 2007-04-01    | 2100-12-01   |
| Rio Bogota entre Espino y Alicachin                         | 0.00                | 180.00              | 2007-04-01    | 2100-12-01   |
| Rio Bogota hasta Achury                                     | 0.00                | 40.00               | 2007-04-01    | 2100-12-01   |
| Sistema Acueducto Bogota (SanRafaelSapoTibitoc)             | 0.00                | 60.00               | 2007-02-01    | 2100-12-01   |
| Tunel Chuza                                                 | 0.00                | 24.00               | 2001-01-01    | 2100-12-01   |

### Formato 9. Arco de Bombeo

| Nombre        | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) | Fecha Entrada | Fecha Salida |
|---------------|---------------------|---------------------|---------------|--------------|
| Bombeo Tomine | 0.00                | 16.00               | 1982-12-01    | 2100-12-01   |

### Formato 10. Capacidad Máxima Arco Generación

| Nombre                      | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) |
|-----------------------------|---------------------|---------------------|
| Arco de Generacion Betania  | 112.20              | 975.00              |
| Arco de Generacion Guavio   | 0.00                | 202.40              |
| Arco de Generacion La Guaca | 0.00                | 70.00               |
| Arco de Generacion Paraiso  | 0.00                | 70.00               |

#### Formato 11. Descarga Máxima Embalse Bogotá

| Embalse | Descarga Máxima (m3/s) |
|---------|------------------------|
| Chuza   | 13.50                  |
| Neusa   | 4.50                   |
| Sisga   | 12.00                  |
| Tomine  | 15.00                  |

#### Formato 12. Capacidad Túneles Chivor

Formato No Registrado

#### Formato 13. Demanda Acueducto y Riego

| Nombre                                          | Año T (m3/s) | Año T+1 (m3/s) | Año T+2 (m3/s) | Año T+3 (m3/s) | Año T+4 (m3/s) | Año T+5 (m3/s) | Factor Recuperación |
|-------------------------------------------------|--------------|----------------|----------------|----------------|----------------|----------------|---------------------|
| Riego Rio Bogota hasta Achury                   | 0.26         | 0.26           | 0.26           | 0.26           | 0.26           | 0.26           | 20                  |
| Sistema Acueducto Bogota (SanRafaelSapoTibitoc) | 15.02        | 15.09          | 15.33          | 15.48          | 15.68          | 15.90          | 85                  |

#### Formato 14. Suministro Gas Natural

Formato No Registrado

#### Formato 15. Transporte Gas Natural

Formato No Registrado

#### Formato 16. Suministro Combustible Diferente a Gas

| Planta      | Combustible           | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-------------|-----------------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| Cartagena 1 | FO No.6 o equivalente | 8,760.00        | 430,456.87               | 430,456.87           | 388,799.75             | 430,456.87           | 416,571.16           | 430,456.87          | 416,571.16           | 430,456.87           | 430,456.87            | 416,571.16                | 430,456.87             | 416,571.16               |
| Cartagena 2 | FO No.6 o equivalente | 8,760.00        | 421,773.00               | 421,773.00           | 380,956.26             | 421,773.00           | 408,167.42           | 421,773.00          | 408,167.42           | 421,773.00           | 421,773.00            | 408,167.42                | 421,773.00             | 408,167.42               |
| Cartagena 3 | FO No.6 o equivalente | 8,760.00        | 455,711.22               | 455,711.22           | 411,610.14             | 455,711.22           | 441,010.86           | 455,711.22          | 441,010.86           | 455,711.22           | 455,711.22            | 441,010.86                | 455,711.22             | 441,010.86               |
| Termozipa 2 | Carbon                | 8,760.00        | 315,517.90               | 315,517.90           | 284,983.91             | 315,517.90           | 305,339.90           | 315,517.90          | 305,339.90           | 315,517.90           | 315,517.90            | 305,339.90                | 315,517.90             | 305,339.90               |
| Termozipa 3 | Carbon                | 8,760.00        | 444,720.11               | 444,720.11           | 401,682.68             | 444,720.11           | 430,374.30           | 444,720.11          | 430,374.30           | 444,720.11           | 444,720.11            | 430,374.30                | 444,720.11             | 430,374.30               |
| Termozipa 4 | Carbon                | 8,760.00        | 424,390.49               | 424,390.49           | 383,320.44             | 424,390.49           | 410,700.47           | 424,390.49          | 410,700.47           | 424,390.49           | 424,390.49            | 410,700.47                | 424,390.49             | 410,700.47               |
| Termozipa 5 | Carbon                | 8,760.00        | 360,931.56               | 360,931.56           | 326,002.70             | 360,931.56           | 349,288.61           | 360,931.56          | 349,288.61           | 360,931.56           | 360,931.56            | 349,288.61                | 360,931.56             | 349,288.61               |

### Formato 17. Almacenamiento Combustible

| Planta      | Combustible                 | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|-------------|-----------------------------|--------------------------|----------------------------|
| Cartagena 1 | FUEL OIL No.6 o equivalente | 32,256.17                | 0.00                       |
| Cartagena 2 | FUEL OIL No.6 o equivalente | 31,603.12                | 0.00                       |
| Cartagena 3 | FUEL OIL No.6 o equivalente | 34,148.60                | 0.00                       |
| Termozipa 2 | Carbon                      | 46,054.70                | 0.00                       |
| Termozipa 3 | Carbon                      | 61,915.21                | 0.00                       |
| Termozipa 4 | Carbon                      | 59,631.48                | 0.00                       |
| Termozipa 5 | Carbon                      | 52,398.61                | 0.00                       |

### Formato 18. Energía Contratada

Formato No Registrado

### Formato 19. Plantas Menores

| Nombre                              | Capacidad Efectiva Neta (MW) | Disponibilidad (%) |
|-------------------------------------|------------------------------|--------------------|
| Charquito                           | 19.40                        | 0.00               |
| Cogenerador Papeles Nacionales S.A. | 12.00                        | 0.00               |
| El Limonar                          | 18.00                        | 0.00               |
| La Junca                            | 19.40                        | 0.00               |
| La Tinta                            | 19.40                        | 0.00               |
| San Antonio                         | 19.40                        | 0.00               |
| Santa Ana                           | 8.00                         | 35.00              |

|            |       |      |
|------------|-------|------|
| Sueva      | 6.00  | 0.10 |
| Tequendama | 19.40 | 0.00 |

Empresa De Energia Del Pacífico S.A. E.S.P

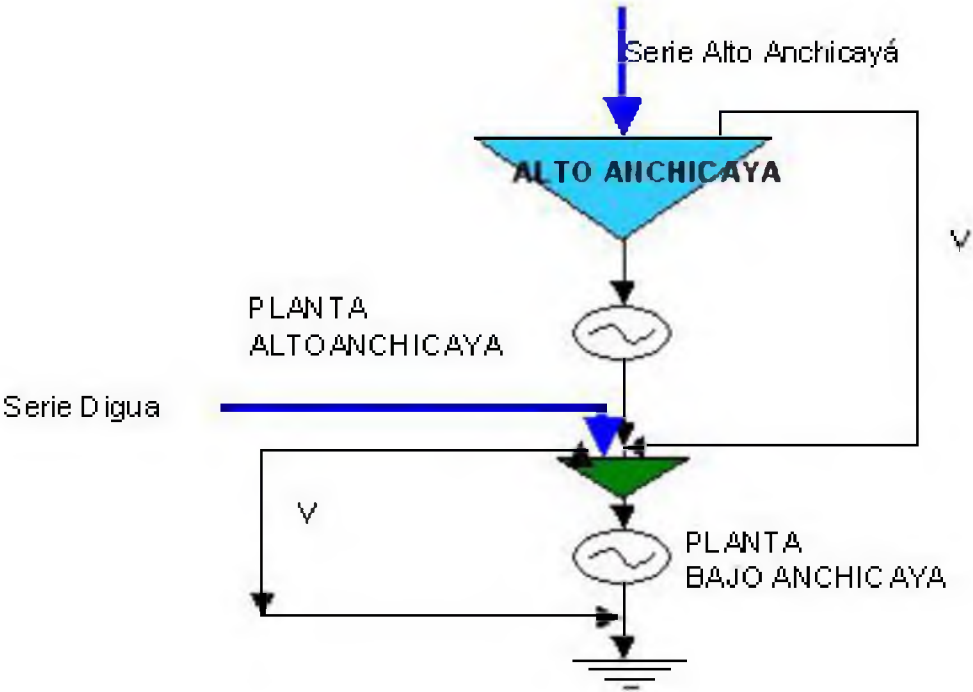
Formato 1. Plantas o Unidades Hidráulicas

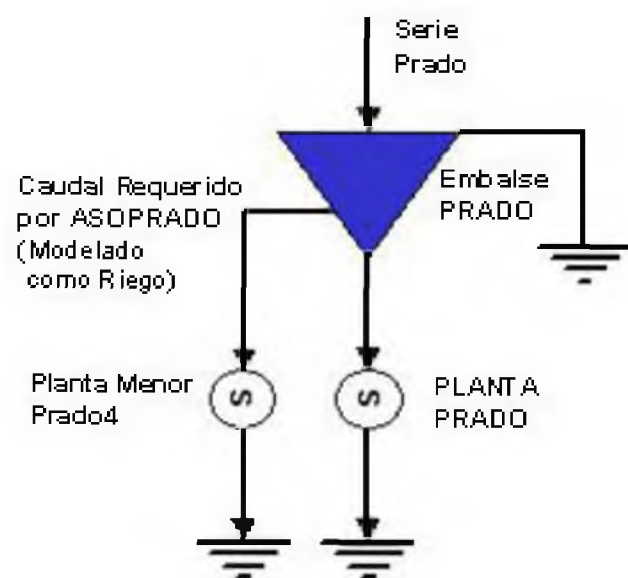
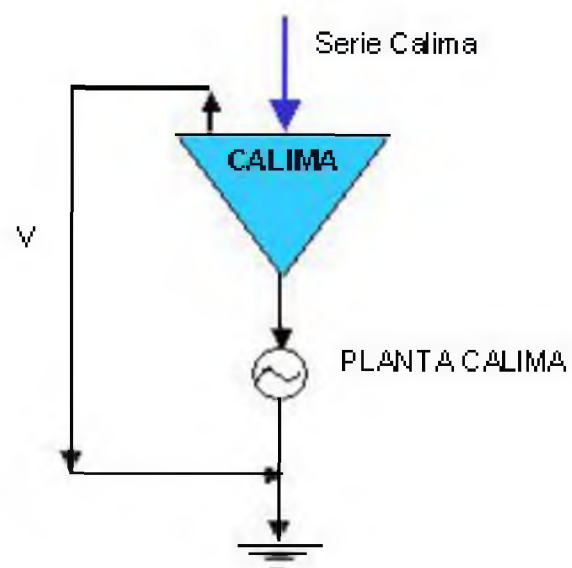
| Nombre         | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|----------------|------------------------------|----------------------|---------|
| Alto Anchicaya | 355.00                       | 3.5491               | 14.1525 |
| Bajo Anchicaya | 74.00                        | 0.7004               | 11.3139 |
| Calima         | 132.00                       | 1.8030               | 13.6918 |
| Prado          | 46.00                        | 0.4904               | 7.4689  |
| Salvajina      | 285.00                       | 0.9998               | 6.7772  |

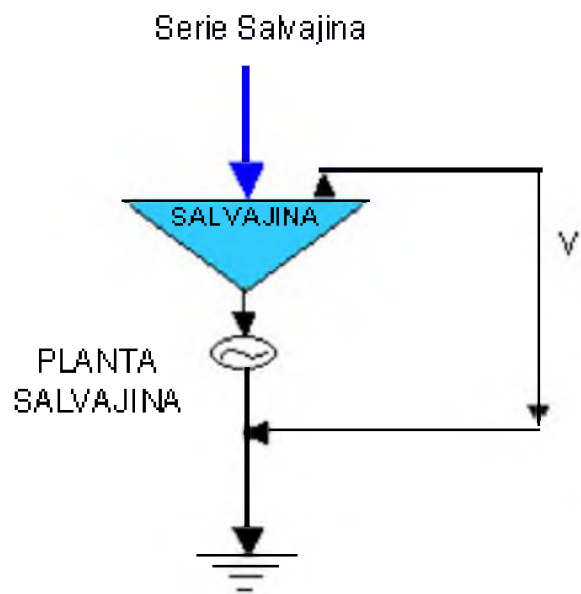
Formato 2. Topología Plantas Hidráulicas

| Nombre Sistema | Elemento Clase | Elemento Nombre | Aportes Rio    | Aportes Embalse | Aportes Planta | Aportes Otro                | Descargas Rio | Descargas Embalse | Descargas Planta | Descargas Otro    | Vertimiento s Rio | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro |
|----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------------------|---------------|-------------------|------------------|-------------------|-------------------|-----------------------|----------------------|--------------------|
| Anchicaya      | E              | Alto Anchicaya  | Alto Anchicaya |                 |                |                             |               |                   | Alto Anchicaya   |                   |                   |                       | Bajo Anchicaya       |                    |
| Anchicaya      | P              | Alto Anchicaya  |                | Alto Anchicaya  |                |                             |               |                   | Bajo Anchicaya   |                   |                   |                       |                      |                    |
| Anchicaya      | P              | Bajo Anchicaya  | Digua          |                 | Alto Anchicaya | Vertimientos Alto Anchicaya |               |                   |                  | Tierra            |                   |                       |                      | Tierra             |
| Calima         | E              | Calima          | Calima         |                 |                |                             |               |                   | Calima           |                   |                   |                       |                      | Tierra             |
| Calima         | P              | Calima          |                | Calima          |                |                             |               |                   |                  | Tierra            |                   |                       |                      |                    |
| Prado          | E              | Prado           | Prado          |                 |                |                             |               |                   | Prado-Prado4     |                   |                   |                       |                      | Tierra             |
| Prado          | OU             | Prado4          |                | Prado           |                |                             |               |                   |                  | Asoprado - Tierra |                   |                       |                      |                    |
| Prado          | P              | Prado           |                | Prado           |                |                             |               |                   |                  | Tierra            |                   |                       |                      |                    |
| Salvajina      | E              | Salvajina       | Salvajina      |                 |                |                             |               |                   | Salvajina        |                   |                   |                       |                      | Tierra             |
| Salvajina      | P              | Salvajina       |                | Salvajina       |                |                             |               |                   |                  | Tierra            |                   |                       |                      |                    |

Formato 2a. Diagramas Topología







**Formato 3.** Plantas o Unidades Térmicas

| Nombre     | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|------------|------------------------------|-----------------------|---------|
| Termovalle | 205.00                       | 6.5790                | 0.4592  |

**Formato 4.** Caudal Medio Mensual

| Rio            | Año  | Caudal Enero (m3/s) | Caudal Febrero (m3/s) | Caudal Marzo (m3/s) | Caudal Abril (m3/s) | Caudal Mayo (m3/s) | Caudal Junio (m3/s) | Caudal Julio (m3/s) | Caudal Agosto (m3/s) | Caudal Septiembre (m3/s) | Caudal Octubre (m3/s) | Caudal Noviembre (m3/s) | Caudal Diciembre (m3/s) |
|----------------|------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| Alto Anchicaya | 1975 |                     |                       |                     |                     |                    |                     |                     | 56.60                | 62.50                    | 70.90                 | 69.20                   | 73.80                   |
| Alto Anchicaya | 1976 | 48.00               | 53.60                 | 46.50               | 49.80               | 58.50              | 38.20               | 16.30               | 11.90                | 19.40                    | 43.40                 | 56.80                   | 39.20                   |
| Alto Anchicaya | 1977 | 24.30               | 22.80                 | 26.20               | 35.50               | 73.00              | 45.70               | 34.90               | 40.40                | 48.10                    | 81.70                 | 64.50                   | 48.30                   |
| Alto Anchicaya | 1978 | 43.50               | 20.00                 | 32.60               | 78.60               | 62.10              | 42.30               | 39.20               | 23.30                | 37.50                    | 58.90                 | 61.50                   | 73.00                   |
| Alto Anchicaya | 1979 | 39.40               | 25.60                 | 45.60               | 51.90               | 57.10              | 51.10               | 32.10               | 38.30                | 54.30                    | 57.70                 | 53.20                   | 46.90                   |
| Alto Anchicaya | 1980 | 35.10               | 47.00                 | 29.10               | 31.50               | 51.70              | 48.30               | 26.80               | 26.70                | 32.20                    | 59.30                 | 53.60                   | 59.10                   |

|                |      |       |       |       |       |       |       |       |       |       |       |       |       |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Alto Anchicaya | 1981 | 36.00 | 55.00 | 46.80 | 73.10 | 78.00 | 53.50 | 47.80 | 37.30 | 32.90 | 68.60 | 53.60 | 55.90 |
| Alto Anchicaya | 1982 | 59.50 | 59.00 | 51.90 | 80.20 | 70.80 | 46.90 | 23.40 | 12.50 | 23.80 | 52.40 | 55.20 | 40.10 |
| Alto Anchicaya | 1983 | 20.90 | 15.60 | 30.50 | 54.00 | 48.20 | 34.80 | 16.90 | 12.00 | 18.40 | 39.90 | 41.50 | 56.20 |
| Alto Anchicaya | 1984 | 44.00 | 50.60 | 33.60 | 49.40 | 60.50 | 47.90 | 42.10 | 44.40 | 64.40 | 81.90 | 56.80 | 62.20 |
| Alto Anchicaya | 1985 | 59.10 | 24.20 | 28.40 | 30.80 | 34.40 | 33.60 | 16.70 | 37.20 | 37.70 | 55.50 | 56.70 | 42.30 |
| Alto Anchicaya | 1986 | 53.70 | 49.00 | 27.90 | 56.10 | 55.80 | 38.10 | 23.40 | 14.30 | 22.40 | 68.70 | 64.00 | 27.10 |
| Alto Anchicaya | 1987 | 31.40 | 28.00 | 17.70 | 27.70 | 51.90 | 32.00 | 23.10 | 32.70 | 33.50 | 68.90 | 50.50 | 40.70 |
| Alto Anchicaya | 1988 | 27.60 | 33.80 | 20.00 | 53.80 | 44.90 | 48.60 | 49.20 | 42.90 | 49.20 | 68.00 | 99.10 | 57.90 |
| Alto Anchicaya | 1989 | 57.30 | 44.70 | 34.60 | 24.10 | 50.70 | 44.50 | 28.30 | 29.20 | 47.30 | 68.00 | 62.40 | 51.50 |
| Alto Anchicaya | 1990 | 46.40 | 43.20 | 40.40 | 48.70 | 38.80 | 29.00 | 25.80 | 18.80 | 31.30 | 46.20 | 62.00 | 40.30 |
| Alto Anchicaya | 1991 | 29.60 | 23.10 | 30.40 | 36.30 | 58.30 | 54.40 | 24.20 | 17.90 | 27.40 | 36.40 | 45.30 | 46.90 |
| Alto Anchicaya | 1992 | 29.60 | 27.50 | 24.00 | 24.40 | 30.80 | 24.10 | 15.70 | 16.52 | 28.80 | 36.80 | 45.60 | 54.90 |
| Alto Anchicaya | 1993 | 47.30 | 36.80 | 31.20 | 50.80 | 59.70 | 32.00 | 23.80 | 15.50 | 34.35 | 62.30 | 74.80 | 59.00 |
| Alto Anchicaya | 1994 | 52.02 | 43.87 | 57.23 | 74.12 | 60.37 | 50.91 | 29.67 | 29.59 | 30.37 | 57.96 | 62.07 | 52.46 |
| Alto Anchicaya | 1995 | 25.30 | 17.80 | 26.50 | 53.90 | 61.40 | 62.50 | 46.40 | 37.70 | 39.40 | 65.90 | 58.40 | 64.40 |
| Alto Anchicaya | 1996 | 35.50 | 41.00 | 52.80 | 48.66 | 69.13 | 56.27 | 46.94 | 46.74 | 50.26 | 65.38 | 67.61 | 47.32 |
| Alto Anchicaya | 1997 | 69.54 | 38.14 | 39.12 | 47.82 | 37.12 | 45.27 | 15.84 | 10.18 | 20.93 | 26.69 | 60.19 | 22.89 |
| Alto Anchicaya | 1998 | 16.70 | 27.70 | 30.00 | 63.51 | 48.98 | 39.70 | 33.90 | 33.30 | 46.80 | 43.90 | 71.91 | 49.60 |
| Alto Anchicaya | 1999 | 60.63 | 77.54 | 51.57 | 57.50 | 48.47 | 53.09 | 32.53 | 37.85 | 52.09 | 64.57 | 72.23 | 65.80 |
| Alto Anchicaya | 2000 | 51.71 | 48.83 | 44.35 | 50.16 | 53.87 | 56.60 | 39.47 | 33.35 | 44.64 | 61.55 | 59.21 | 39.82 |
| Alto Anchicaya | 2001 | 34.04 | 37.62 | 47.31 | 31.39 | 52.36 | 43.12 | 34.14 | 21.21 | 36.22 | 58.25 | 69.39 | 69.40 |
| Alto Anchicaya | 2002 | 30.71 | 21.48 | 40.41 | 63.11 | 37.77 | 28.82 | 34.34 | 27.59 | 36.65 | 54.54 | 51.40 | 50.92 |
| Alto Anchicaya | 2003 | 34.01 | 33.79 | 33.99 | 58.54 | 68.47 | 60.80 | 37.24 | 38.72 | 40.00 | 71.39 | 60.47 | 52.61 |
| Alto Anchicaya | 2004 | 52.60 | 20.52 | 21.40 | 43.91 | 54.37 | 32.98 | 37.27 | 25.77 | 44.86 | 68.61 | 65.53 | 52.92 |
| Alto Anchicaya | 2005 | 50.78 | 47.65 | 45.63 | 43.46 | 52.70 | 41.51 | 27.59 | 30.09 | 32.01 | 69.25 | 77.15 | 45.55 |
| Alto Anchicaya | 2006 | 42.90 | 45.27 | 54.85 | 63.61 | 66.52 | 59.62 | 29.14 | 26.54 | 22.50 | 37.73 | 54.27 | 61.27 |
| Alto Anchicaya | 2007 | 60.42 | 28.77 | 38.45 | 63.55 | 60.38 | 45.80 | 37.82 | 39.93 | 42.02 | 68.33 | 64.91 | 66.41 |

|                |      |       |       |       |       |       |       |       |       |       |       |       |       |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Alto Anchicaya | 2008 | 65.62 | 52.99 | 39.64 | 54.80 | 69.47 | 45.07 | 40.54 | 42.43 | 39.82 | 45.41 | 56.00 | 41.53 |
| Calima         | 1946 | 12.90 | 7.70  | 9.70  | 20.90 | 30.50 | 11.40 | 6.40  | 4.60  | 3.50  | 9.40  | 19.00 | 17.00 |
| Calima         | 1947 | 13.50 | 11.60 | 9.00  | 12.40 | 16.30 | 20.20 | 18.60 | 12.80 | 15.70 | 27.50 | 18.90 | 12.40 |
| Calima         | 1948 | 7.80  | 7.20  | 7.80  | 15.00 | 23.70 | 22.60 | 11.60 | 5.20  | 8.60  | 16.80 | 23.00 | 13.10 |
| Calima         | 1949 | 12.20 | 13.70 | 13.70 | 13.20 | 24.00 | 18.60 | 15.50 | 10.10 | 9.70  | 25.30 | 32.30 | 17.60 |
| Calima         | 1950 | 13.20 | 23.00 | 28.20 | 28.90 | 39.80 | 35.70 | 16.40 | 13.90 | 8.60  | 17.70 | 29.90 | 25.80 |
| Calima         | 1951 | 14.80 | 18.40 | 11.80 | 10.60 | 16.00 | 15.90 | 12.60 | 7.60  | 8.20  | 10.90 | 22.60 | 17.40 |
| Calima         | 1952 | 14.10 | 14.80 | 9.50  | 10.30 | 20.30 | 13.50 | 10.50 | 10.30 | 6.70  | 10.30 | 18.70 | 20.10 |
| Calima         | 1953 | 13.30 | 11.20 | 8.30  | 13.10 | 15.80 | 10.20 | 6.40  | 4.20  | 6.50  | 24.20 | 27.40 | 20.30 |
| Calima         | 1954 | 11.70 | 8.60  | 8.70  | 18.30 | 21.60 | 15.10 | 12.80 | 10.90 | 6.50  | 17.90 | 22.40 | 29.20 |
| Calima         | 1955 | 17.20 | 11.20 | 14.60 | 22.50 | 18.60 | 17.90 | 14.10 | 12.60 | 12.20 | 30.30 | 29.00 | 32.60 |
| Calima         | 1956 | 22.60 | 17.60 | 13.20 | 15.10 | 16.80 | 19.30 | 9.50  | 6.10  | 5.90  | 15.40 | 18.70 | 16.70 |
| Calima         | 1957 | 11.90 | 8.30  | 8.80  | 11.70 | 12.80 | 9.80  | 5.70  | 4.40  | 4.10  | 8.60  | 13.80 | 13.90 |
| Calima         | 1958 | 7.60  | 5.90  | 6.00  | 8.70  | 14.20 | 11.40 | 6.80  | 7.60  | 4.60  | 7.50  | 11.60 | 11.90 |
| Calima         | 1959 | 9.30  | 5.50  | 5.00  | 10.20 | 14.90 | 17.80 | 11.10 | 8.50  | 6.20  | 14.80 | 14.90 | 19.20 |
| Calima         | 1960 | 22.50 | 18.70 | 8.40  | 14.00 | 15.10 | 14.30 | 13.70 | 8.60  | 6.70  | 15.40 | 21.40 | 26.10 |
| Calima         | 1961 | 11.60 | 8.80  | 6.80  | 17.90 | 12.20 | 14.00 | 9.50  | 5.10  | 5.90  | 8.20  | 24.90 | 15.30 |
| Calima         | 1962 | 11.90 | 10.50 | 10.20 | 19.90 | 19.70 | 19.00 | 11.40 | 8.80  | 6.50  | 15.00 | 21.10 | 15.80 |
| Calima         | 1963 | 9.70  | 15.20 | 12.90 | 15.40 | 20.40 | 13.90 | 10.00 | 7.90  | 7.00  | 12.20 | 31.90 | 12.10 |
| Calima         | 1964 | 6.90  | 5.10  | 5.00  | 22.80 | 18.00 | 23.00 | 15.00 | 12.60 | 10.60 | 18.30 | 16.70 | 14.70 |
| Calima         | 1965 | 13.00 | 7.60  | 6.00  | 12.00 | 13.30 | 5.60  | 4.10  | 5.40  | 9.20  | 15.90 | 19.50 | 12.40 |
| Calima         | 1966 | 7.80  | 5.50  | 5.40  | 6.90  | 13.20 | 14.10 | 12.80 | 8.90  | 6.20  | 11.60 | 22.50 | 9.50  |
| Calima         | 1967 | 9.60  | 10.50 | 10.30 | 4.90  | 11.50 | 11.20 | 6.50  | 6.10  | 4.80  | 12.60 | 19.40 | 13.50 |
| Calima         | 1968 | 7.80  | 8.70  | 8.30  | 16.30 | 11.80 | 14.90 | 9.50  | 5.70  | 11.60 | 19.60 | 18.60 | 12.70 |
| Calima         | 1969 | 7.50  | 6.20  | 6.10  | 13.50 | 15.60 | 12.30 | 4.10  | 4.50  | 6.60  | 18.90 | 13.80 | 10.30 |
| Calima         | 1970 | 7.60  | 7.60  | 11.10 | 12.70 | 14.80 | 14.00 | 8.50  | 5.50  | 8.00  | 17.00 | 28.00 | 20.70 |
| Calima         | 1971 | 23.90 | 21.30 | 22.60 | 18.10 | 24.30 | 13.10 | 8.20  | 10.80 | 15.40 | 21.10 | 26.90 | 12.70 |
| Calima         | 1972 | 16.70 | 11.80 | 9.60  | 9.40  | 14.00 | 10.70 | 5.10  | 3.40  | 4.50  | 8.30  | 17.10 | 10.70 |
| Calima         | 1973 | 3.70  | 0.60  | 3.50  | 6.70  | 12.30 | 16.80 | 9.10  | 18.40 | 24.90 | 27.40 | 29.50 | 20.50 |
| Calima         | 1974 | 20.50 | 22.50 | 15.80 | 12.90 | 15.80 | 14.70 | 7.90  | 6.50  | 11.10 | 20.10 | 26.20 | 15.80 |
| Calima         | 1975 | 7.90  | 11.20 | 12.70 | 9.70  | 15.90 | 11.00 | 13.00 | 10.80 | 14.80 | 16.60 | 35.40 | 31.10 |
| Calima         | 1976 | 9.60  | 7.30  | 9.60  | 8.60  | 16.70 | 9.50  | 2.80  | 1.00  | 1.50  | 6.20  | 9.30  | 8.00  |
| Calima         | 1977 | 4.10  | 3.10  | 2.30  | 4.30  | 10.60 | 9.10  | 5.80  | 10.70 | 7.60  | 22.40 | 22.70 | 11.80 |
| Calima         | 1978 | 7.90  | 3.90  | 6.20  | 19.60 | 18.10 | 10.00 | 9.20  | 5.20  | 7.70  | 17.30 | 18.10 | 21.10 |
| Calima         | 1979 | 8.00  | 5.10  | 8.30  | 16.50 | 16.50 | 15.00 | 6.90  | 7.70  | 13.10 | 13.20 | 19.80 | 15.00 |
| Calima         | 1980 | 8.30  | 9.30  | 5.30  | 5.30  | 9.20  | 8.90  | 3.10  | 2.40  | 2.70  | 11.70 | 15.50 | 15.90 |
| Calima         | 1981 | 8.30  | 7.50  | 7.60  | 15.60 | 25.70 | 16.50 | 13.60 | 7.80  | 7.90  | 13.30 | 26.90 | 17.60 |
| Calima         | 1982 | 15.10 | 12.00 | 10.70 | 15.20 | 26.10 | 12.80 | 4.90  | 1.20  | 3.10  | 10.80 | 14.60 | 10.80 |
| Calima         | 1983 | 4.90  | 1.30  | 4.80  | 14.70 | 14.00 | 8.60  | 3.10  | 0.20  | 1.50  | 7.40  | 8.60  | 14.90 |
| Calima         | 1984 | 13.30 | 13.70 | 8.00  | 13.00 | 13.80 | 11.00 | 11.10 | 7.80  | 12.50 | 22.50 | 24.40 | 14.40 |
| Calima         | 1985 | 17.30 | 9.20  | 5.40  | 6.20  | 9.50  | 9.50  | 2.40  | 6.60  | 11.30 | 17.30 | 17.40 | 13.10 |
| Calima         | 1986 | 10.95 | 12.15 | 12.35 | 17.60 | 12.88 | 12.08 | 4.56  | 4.07  | 3.13  | 18.20 | 15.94 | 7.21  |
| Calima         | 1987 | 4.80  | 2.59  | 5.70  | 5.57  | 8.73  | 4.73  | 3.72  | 5.70  | 4.87  | 14.20 | 9.90  | 8.28  |
| Calima         | 1988 | 3.81  | 4.48  | 4.76  | 13.54 | 13.94 | 11.90 | 12.03 | 8.60  | 14.15 | 18.36 | 32.75 | 22.16 |

|        |      |       |       |       |       |       |       |       |       |       |       |       |       |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Calima | 1989 | 16.77 | 12.53 | 13.58 | 6.63  | 11.24 | 9.30  | 5.88  | 5.70  | 10.91 | 15.14 | 17.92 | 21.17 |
| Calima | 1990 | 14.15 | 8.34  | 6.40  | 8.50  | 8.80  | 6.25  | 4.70  | 2.56  | 4.20  | 11.46 | 13.20 | 13.16 |
| Calima | 1991 | 8.53  | 5.70  | 6.25  | 6.71  | 13.25 | 11.09 | 8.99  | 4.74  | 5.30  | 6.27  | 9.07  | 7.33  |
| Calima | 1992 | 5.55  | 5.96  | 6.00  | 6.71  | 6.86  | 4.72  | 2.89  | 1.55  | 3.60  | 5.20  | 6.90  | 10.60 |
| Calima | 1993 | 9.60  | 6.30  | 7.80  | 12.40 | 17.00 | 7.20  | 3.90  | 2.00  | 6.07  | 8.40  | 15.80 | 17.50 |
| Calima | 1994 | 10.46 | 12.60 | 18.38 | 21.98 | 19.71 | 15.42 | 5.75  | 2.96  | 4.06  | 10.67 | 17.10 | 12.10 |
| Calima | 1995 | 3.90  | 1.90  | 2.60  | 11.50 | 9.30  | 9.80  | 7.80  | 8.50  | 4.70  | 16.60 | 16.40 | 14.90 |
| Calima | 1996 | 9.80  | 12.80 | 12.50 | 9.48  | 14.23 | 14.09 | 11.75 | 6.41  | 7.61  | 13.26 | 15.23 | 13.54 |
| Calima | 1997 | 17.35 | 11.56 | 11.95 | 10.33 | 8.86  | 12.26 | 4.66  | 3.72  | 3.59  | 3.63  | 12.18 | 5.02  |
| Calima | 1998 | 3.40  | 3.70  | 4.07  | 9.11  | 9.90  | 11.00 | 7.20  | 7.60  | 11.70 | 7.87  | 19.79 | 13.20 |
| Calima | 1999 | 12.26 | 20.27 | 22.28 | 17.58 | 14.08 | 10.03 | 5.99  | 4.91  | 17.50 | 17.46 | 29.09 | 25.08 |
| Calima | 2000 | 18.43 | 11.75 | 19.31 | 22.97 | 25.75 | 15.13 | 8.90  | 4.97  | 8.22  | 9.49  | 24.37 | 8.27  |
| Calima | 2001 | 4.80  | 3.78  | 9.09  | 11.99 | 11.36 | 9.54  | 6.62  | 2.63  | 3.69  | 6.62  | 15.16 | 17.42 |
| Calima | 2002 | 8.18  | 3.13  | 4.91  | 10.46 | 8.22  | 5.01  | 4.10  | 2.05  | 4.15  | 8.75  | 13.57 | 12.66 |
| Calima | 2003 | 3.55  | 3.29  | 3.01  | 12.30 | 9.53  | 10.40 | 6.75  | 6.80  | 5.52  | 21.40 | 22.28 | 18.65 |
| Calima | 2004 | 16.50 | 7.00  | 4.19  | 8.20  | 10.84 | 10.83 | 10.09 | 6.67  | 11.22 | 17.63 | 23.94 | 15.84 |
| Calima | 2005 | 11.35 | 13.73 | 12.14 | 11.64 | 15.93 | 9.52  | 7.93  | 5.49  | 5.88  | 11.99 | 20.23 | 20.20 |
| Calima | 2006 | 14.30 | 10.90 | 16.20 | 25.81 | 23.08 | 15.69 | 9.42  | 6.36  | 10.69 | 15.55 | 15.47 | 18.30 |
| Calima | 2007 | 12.00 | 6.43  | 10.74 | 16.00 | 14.87 | 12.33 | 9.58  | 10.44 | 11.33 | 21.32 | 26.40 | 26.68 |
| Calima | 2008 | 16.43 | 16.22 | 17.30 | 20.33 | 22.98 | 14.19 | 10.61 | 9.63  | 13.27 | 12.28 | 23.02 | 21.29 |
| Digua  | 1975 |       |       |       |       |       |       |       | 23.70 | 36.80 | 36.90 | 62.90 | 73.10 |
| Digua  | 1976 | 38.20 | 40.90 | 54.10 | 34.10 | 43.70 | 30.40 | 12.00 | 5.80  | 8.20  | 18.10 | 35.90 | 19.30 |
| Digua  | 1977 | 12.60 | 10.20 | 9.50  | 16.20 | 51.40 | 35.00 | 19.40 | 26.50 | 26.20 | 44.80 | 43.40 | 22.00 |
| Digua  | 1978 | 16.70 | 6.90  | 14.40 | 43.20 | 41.80 | 28.00 | 21.90 | 18.10 | 21.90 | 46.00 | 40.10 | 42.30 |
| Digua  | 1979 | 20.30 | 12.20 | 18.00 | 17.00 | 22.20 | 29.70 | 19.30 | 19.60 | 41.00 | 43.00 | 42.30 | 37.70 |
| Digua  | 1980 | 18.90 | 22.70 | 17.70 | 14.70 | 29.30 | 22.20 | 20.90 | 21.90 | 25.60 | 39.50 | 45.20 | 40.80 |
| Digua  | 1981 | 26.90 | 21.60 | 18.50 | 32.80 | 43.00 | 34.40 | 29.70 | 29.20 | 26.40 | 34.10 | 59.00 | 26.60 |
| Digua  | 1982 | 38.20 | 33.70 | 30.30 | 49.80 | 38.10 | 20.60 | 16.40 | 10.10 | 20.20 | 40.90 | 39.80 | 21.40 |
| Digua  | 1983 | 10.70 | 7.80  | 8.30  | 22.50 | 25.40 | 21.70 | 6.80  | 5.50  | 8.30  | 21.40 | 37.00 | 45.10 |
| Digua  | 1984 | 28.20 | 23.80 | 19.50 | 20.60 | 29.80 | 23.90 | 26.80 | 24.80 | 39.70 | 52.20 | 50.60 | 46.60 |
| Digua  | 1985 | 33.00 | 17.70 | 18.50 | 24.30 | 27.30 | 31.10 | 17.90 | 29.00 | 28.50 | 51.50 | 57.00 | 39.00 |
| Digua  | 1986 | 27.70 | 35.70 | 21.00 | 34.40 | 40.80 | 31.00 | 20.80 | 13.30 | 13.90 | 65.60 | 47.30 | 26.30 |
| Digua  | 1987 | 21.10 | 18.70 | 14.50 | 19.10 | 35.50 | 29.60 | 19.90 | 25.50 | 23.80 | 53.00 | 35.90 | 32.00 |
| Digua  | 1988 | 25.80 | 23.80 | 16.30 | 29.40 | 31.80 | 36.80 | 36.60 | 30.70 | 35.80 | 51.90 | 67.60 | 35.30 |
| Digua  | 1989 | 34.90 | 37.40 | 25.00 | 16.50 | 38.40 | 32.40 | 24.10 | 21.90 | 31.10 | 43.10 | 52.00 | 41.50 |
| Digua  | 1990 | 30.80 | 26.00 | 21.90 | 28.70 | 26.30 | 20.00 | 14.90 | 15.20 | 23.60 | 51.20 | 48.70 | 36.30 |
| Digua  | 1991 | 28.30 | 17.40 | 22.00 | 27.50 | 41.10 | 32.20 | 19.80 | 15.00 | 25.20 | 33.90 | 42.50 | 36.90 |
| Digua  | 1992 | 21.10 | 23.99 | 16.33 | 13.28 | 20.51 | 19.98 | 14.50 | 13.40 | 25.80 | 33.20 | 33.90 | 42.90 |
| Digua  | 1993 | 35.80 | 27.90 | 25.00 | 31.00 | 35.70 | 25.87 | 23.50 | 16.70 | 27.55 | 44.80 | 49.90 | 35.27 |
| Digua  | 1994 | 30.72 | 32.12 | 33.56 | 53.61 | 52.85 | 34.23 | 15.37 | 18.09 | 21.40 | 65.40 | 65.24 | 31.57 |
| Digua  | 1995 | 11.77 | 10.94 | 17.05 | 36.69 | 38.63 | 38.99 | 27.99 | 27.07 | 32.70 | 51.13 | 34.72 | 41.64 |
| Digua  | 1996 | 24.10 | 25.00 | 25.40 | 36.27 | 30.58 | 32.32 | 30.18 | 34.93 | 37.78 | 48.96 | 35.62 | 36.84 |
| Digua  | 1997 | 48.86 | 24.39 | 30.90 | 30.03 | 24.17 | 27.85 | 9.67  | 5.57  | 12.26 | 14.66 | 41.87 | 17.57 |
| Digua  | 1998 | 9.60  | 19.90 | 14.79 | 27.03 | 25.74 | 22.40 | 15.20 | 21.50 | 30.20 | 29.21 | 57.57 | 33.80 |
| Digua  | 1999 | 37.68 | 48.86 | 23.49 | 31.10 | 24.27 | 23.23 | 22.32 | 30.30 | 35.38 | 35.70 | 45.88 | 47.75 |

|       |      |        |        |        |        |        |        |       |        |       |        |        |        |
|-------|------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|
| Digua | 2000 | 28.56  | 19.86  | 25.66  | 27.02  | 26.42  | 32.50  | 39.07 | 27.08  | 29.98 | 31.16  | 31.16  | 28.25  |
| Digua | 2001 | 18.67  | 17.93  | 21.08  | 12.80  | 28.01  | 25.16  | 24.20 | 13.59  | 24.81 | 43.24  | 44.04  | 44.64  |
| Digua | 2002 | 23.77  | 14.37  | 23.01  | 42.19  | 33.22  | 19.38  | 26.24 | 22.95  | 33.20 | 44.38  | 38.34  | 38.52  |
| Digua | 2003 | 23.16  | 21.33  | 21.19  | 38.66  | 30.53  | 34.55  | 23.83 | 27.88  | 26.87 | 51.22  | 30.23  | 35.04  |
| Digua | 2004 | 31.88  | 12.18  | 9.58   | 19.78  | 39.47  | 27.64  | 24.78 | 16.99  | 27.84 | 35.48  | 47.08  | 36.87  |
| Digua | 2005 | 33.52  | 29.03  | 23.20  | 23.74  | 36.64  | 28.10  | 15.93 | 20.26  | 43.11 | 40.81  | 34.26  | 17.95  |
| Digua | 2006 | 18.73  | 14.06  | 19.02  | 43.88  | 49.36  | 38.39  | 20.90 | 15.07  | 14.22 | 27.89  | 37.64  | 40.87  |
| Digua | 2007 | 33.27  | 16.24  | 18.09  | 34.42  | 32.35  | 26.75  | 24.93 | 23.68  | 27.69 | 57.61  | 47.99  | 63.14  |
| Digua | 2008 | 43.17  | 36.64  | 23.23  | 27.57  | 38.78  | 23.76  | 18.79 | 22.25  | 24.13 | 28.71  | 31.76  | 30.96  |
| Prado | 1955 | 41.20  | 68.10  | 74.60  | 73.40  | 36.00  | 47.10  | 39.30 | 22.40  | 23.60 | 87.60  | 76.10  | 114.60 |
| Prado | 1956 | 62.50  | 77.00  | 56.30  | 72.70  | 55.90  | 57.40  | 24.30 | 9.40   | 40.30 | 107.10 | 79.40  | 89.90  |
| Prado | 1957 | 25.70  | 37.50  | 62.20  | 70.00  | 83.60  | 41.80  | 10.40 | 15.00  | 14.70 | 77.60  | 87.30  | 32.60  |
| Prado | 1958 | 15.90  | 19.70  | 30.10  | 44.90  | 40.70  | 14.40  | 17.50 | 9.60   | 7.20  | 37.80  | 55.40  | 72.40  |
| Prado | 1959 | 49.10  | 53.30  | 18.10  | 32.40  | 63.70  | 43.00  | 22.80 | 19.90  | 10.80 | 64.00  | 97.20  | 62.50  |
| Prado | 1960 | 69.20  | 68.50  | 40.00  | 48.20  | 57.20  | 37.20  | 30.70 | 15.60  | 14.50 | 71.50  | 95.60  | 135.00 |
| Prado | 1961 | 31.40  | 33.40  | 30.90  | 104.00 | 33.60  | 38.70  | 24.10 | 8.20   | 9.00  | 32.40  | 80.60  | 30.00  |
| Prado | 1962 | 25.00  | 24.60  | 55.70  | 54.30  | 88.70  | 66.20  | 18.30 | 17.40  | 7.80  | 70.70  | 97.40  | 47.60  |
| Prado | 1963 | 37.70  | 72.00  | 41.80  | 100.00 | 115.00 | 28.10  | 17.90 | 13.30  | 7.10  | 43.60  | 130.00 | 36.10  |
| Prado | 1964 | 14.40  | 14.60  | 7.40   | 51.70  | 37.70  | 57.30  | 32.00 | 21.90  | 17.00 | 24.80  | 49.20  | 38.40  |
| Prado | 1965 | 22.00  | 5.90   | 13.50  | 104.00 | 58.50  | 15.40  | 4.70  | 3.00   | 8.60  | 41.40  | 216.00 | 102.50 |
| Prado | 1966 | 34.60  | 14.20  | 43.00  | 44.40  | 51.70  | 47.40  | 22.80 | 16.90  | 11.60 | 71.60  | 156.00 | 116.40 |
| Prado | 1967 | 34.10  | 44.90  | 54.80  | 80.60  | 74.80  | 45.90  | 23.90 | 13.50  | 10.60 | 48.40  | 100.00 | 52.00  |
| Prado | 1968 | 40.10  | 64.90  | 50.10  | 151.00 | 77.40  | 61.30  | 26.80 | 11.60  | 20.80 | 146.10 | 111.30 | 51.60  |
| Prado | 1969 | 23.80  | 23.50  | 18.70  | 87.40  | 92.10  | 37.00  | 12.40 | 10.90  | 19.00 | 142.70 | 107.70 | 53.80  |
| Prado | 1970 | 23.20  | 34.60  | 19.40  | 41.00  | 77.10  | 26.90  | 16.90 | 12.10  | 20.00 | 70.60  | 126.00 | 79.60  |
| Prado | 1971 | 123.50 | 81.00  | 134.00 | 127.00 | 138.70 | 32.00  | 17.80 | 29.30  | 25.60 | 52.40  | 64.00  | 47.30  |
| Prado | 1972 | 101.80 | 30.70  | 82.80  | 53.00  | 75.80  | 50.20  | 87.10 | 44.50  | 45.10 | 34.30  | 78.00  | 51.90  |
| Prado | 1973 | 17.20  | 17.80  | 22.00  | 22.30  | 34.20  | 36.20  | 31.50 | 33.60  | 33.20 | 31.30  | 94.20  | 137.70 |
| Prado | 1974 | 59.00  | 216.70 | 116.70 | 101.00 | 102.00 | 63.40  | 85.40 | 67.80  | 62.60 | 56.30  | 54.70  | 49.40  |
| Prado | 1975 | 57.30  | 66.80  | 66.20  | 66.90  | 71.70  | 59.10  | 61.70 | 70.50  | 72.40 | 69.10  | 63.90  | 116.10 |
| Prado | 1976 | 78.60  | 79.10  | 76.60  | 81.30  | 120.60 | 75.90  | 82.50 | 54.90  | 22.40 | 18.70  | 34.50  | 27.90  |
| Prado | 1977 | 39.30  | 27.40  | 27.70  | 54.50  | 41.40  | 29.00  | 20.40 | 12.20  | 15.10 | 36.30  | 62.30  | 42.70  |
| Prado | 1978 | 36.10  | 34.90  | 45.00  | 76.90  | 51.50  | 64.90  | 43.80 | 43.10  | 45.00 | 52.10  | 38.30  | 26.90  |
| Prado | 1979 | 47.50  | 58.00  | 59.40  | 82.80  | 36.10  | 39.30  | 45.40 | 45.70  | 49.30 | 52.00  | 90.50  | 83.90  |
| Prado | 1980 | 52.40  | 62.50  | 80.30  | 50.20  | 45.20  | 37.10  | 25.40 | 17.00  | 20.10 | 27.70  | 37.50  | 43.20  |
| Prado | 1981 | 37.00  | 37.50  | 55.80  | 49.20  | 56.90  | 103.00 | 70.50 | 46.30  | 45.20 | 50.30  | 45.80  | 46.00  |
| Prado | 1982 | 84.30  | 94.00  | 94.00  | 139.00 | 119.90 | 97.60  | 64.90 | 44.20  | 36.80 | 24.90  | 60.40  | 50.40  |
| Prado | 1983 | 80.90  | 60.30  | 49.90  | 49.60  | 65.90  | 51.40  | 38.70 | 31.00  | 19.10 | 19.60  | 21.80  | 27.60  |
| Prado | 1984 | 57.20  | 64.90  | 68.60  | 74.90  | 47.60  | 52.80  | 47.10 | 58.30  | 54.50 | 50.90  | 82.40  | 58.60  |
| Prado | 1985 | 68.60  | 53.80  | 44.80  | 33.60  | 40.60  | 42.30  | 30.90 | 334.90 | 51.20 | 69.60  | 61.00  | 60.00  |
| Prado | 1986 | 54.00  | 61.10  | 89.70  | 117.30 | 94.30  | 74.00  | 61.40 | 52.70  | 33.50 | 59.00  | 73.40  | 57.40  |
| Prado | 1987 | 45.40  | 52.30  | 52.80  | 41.20  | 51.00  | 33.60  | 25.40 | 26.40  | 19.50 | 19.70  | 28.00  | 68.20  |
| Prado | 1988 | 80.61  | 54.48  | 53.84  | 41.23  | 38.03  | 38.73  | 40.26 | 43.90  | 46.37 | 43.71  | 66.48  | 169.28 |
| Prado | 1989 | 57.35  | 96.71  | 161.11 | 76.92  | 66.81  | 56.75  | 56.30 | 54.99  | 41.09 | 60.69  | 54.37  | 61.11  |
| Prado | 1990 | 57.31  | 58.11  | 65.32  | 70.13  | 78.76  | 57.63  | 51.66 | 36.81  | 19.89 | 24.79  | 41.14  | 63.68  |

|           |      |        |        |        |        |        |        |        |        |       |        |        |        |
|-----------|------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| Prado     | 1991 | 43.25  | 41.93  | 56.64  | 85.09  | 65.37  | 47.12  | 31.53  | 23.76  | 22.16 | 36.74  | 37.33  | 60.85  |
| Prado     | 1992 | 45.20  | 41.00  | 5.00   | 28.50  | 43.00  | 14.70  | 7.80   | 7.10   | 8.70  | 9.30   | 77.50  | 86.30  |
| Prado     | 1993 | 37.42  | 66.28  | 65.82  | 78.47  | 94.31  | 25.56  | 11.00  | 7.57   | 17.75 | 27.15  | 115.97 | 72.50  |
| Prado     | 1994 | 55.45  | 49.10  | 79.74  | 103.20 | 80.24  | 37.96  | 13.22  | 9.29   | 18.51 | 90.45  | 123.80 | 37.30  |
| Prado     | 1995 | 10.45  | 20.23  | 61.65  | 93.96  | 71.70  | 37.34  | 22.86  | 40.38  | 12.65 | 79.98  | 89.99  | 53.44  |
| Prado     | 1996 | 62.05  | 61.41  | 102.06 | 65.65  | 97.93  | 60.61  | 26.85  | 78.10  | 20.68 | 69.11  | 59.80  | 53.67  |
| Prado     | 1997 | 88.63  | 54.50  | 45.41  | 45.25  | 29.61  | 31.47  | 12.31  | 4.86   | 10.47 | 16.39  | 33.90  | 16.03  |
| Prado     | 1998 | 6.98   | 13.65  | 22.66  | 74.27  | 65.45  | 30.13  | 22.60  | 16.76  | 21.53 | 48.71  | 112.36 | 101.42 |
| Prado     | 1999 | 76.01  | 120.05 | 80.19  | 88.43  | 60.22  | 53.87  | 30.90  | 10.34  | 29.55 | 89.01  | 108.59 | 99.56  |
| Prado     | 2000 | 48.10  | 70.66  | 95.99  | 62.64  | 64.04  | 47.55  | 25.22  | 15.64  | 27.89 | 42.37  | 68.44  | 29.52  |
| Prado     | 2001 | 14.84  | 22.23  | 69.19  | 22.31  | 41.75  | 30.62  | 9.90   | 7.05   | 13.30 | 25.54  | 76.82  | 105.27 |
| Prado     | 2002 | 18.35  | 17.65  | 37.66  | 109.62 | 65.77  | 53.16  | 15.29  | 8.68   | 14.92 | 47.26  | 53.73  | 49.04  |
| Prado     | 2003 | 14.41  | 24.88  | 43.61  | 83.60  | 29.77  | 41.77  | 12.24  | 9.78   | 10.98 | 73.56  | 92.39  | 83.90  |
| Prado     | 2004 | 43.71  | 25.76  | 12.80  | 67.14  | 54.39  | 19.84  | 16.85  | 8.18   | 14.72 | 71.08  | 132.22 | 80.86  |
| Prado     | 2005 | 33.91  | 58.93  | 50.61  | 38.71  | 73.03  | 21.87  | 11.68  | 10.13  | 13.86 | 114.91 | 118.16 | 83.93  |
| Prado     | 2006 | 56.83  | 47.20  | 102.78 | 119.51 | 74.56  | 51.41  | 17.22  | 12.75  | 10.01 | 73.93  | 99.38  | 81.30  |
| Prado     | 2007 | 29.06  | 15.94  | 31.69  | 87.37  | 75.48  | 37.46  | 14.83  | 16.96  | 13.21 | 96.71  | 82.37  | 94.22  |
| Prado     | 2008 | 59.86  | 89.54  | 99.85  | 80.27  | 118.48 | 54.86  | 39.67  | 38.30  | 33.59 | 66.10  | 230.87 | 101.52 |
| Salvajina | 1946 |        |        |        |        |        |        |        |        |       | 52.00  | 121.00 | 144.00 |
| Salvajina | 1947 | 129.00 | 106.00 | 75.00  | 61.00  | 72.00  | 95.00  | 94.00  | 78.00  | 74.00 | 212.00 | 255.00 | 139.00 |
| Salvajina | 1948 | 95.00  | 77.00  | 144.00 | 201.00 | 135.00 | 117.00 | 72.00  | 60.00  | 39.00 | 93.00  | 135.00 | 123.00 |
| Salvajina | 1949 | 149.00 | 151.00 | 120.00 | 127.00 | 160.00 | 121.00 | 98.00  | 79.00  | 64.00 | 122.00 | 288.00 | 256.00 |
| Salvajina | 1950 | 197.00 | 379.00 | 373.00 | 317.00 | 375.00 | 294.00 | 202.00 | 129.00 | 80.00 | 127.00 | 269.00 | 336.00 |
| Salvajina | 1951 | 224.00 | 208.00 | 184.00 | 135.00 | 170.00 | 125.00 | 119.00 | 73.00  | 65.00 | 90.00  | 202.00 | 197.00 |
| Salvajina | 1952 | 161.00 | 159.00 | 125.00 | 125.00 | 173.00 | 116.00 | 92.00  | 72.00  | 50.00 | 62.00  | 147.00 | 241.00 |
| Salvajina | 1953 | 151.00 | 125.00 | 100.00 | 127.00 | 128.00 | 107.00 | 82.00  | 59.00  | 54.00 | 160.00 | 284.00 | 332.00 |
| Salvajina | 1954 | 154.00 | 143.00 | 125.00 | 219.00 | 144.00 | 124.00 | 135.00 | 119.00 | 52.00 | 164.00 | 257.00 | 344.00 |
| Salvajina | 1955 | 234.00 | 123.00 | 210.00 | 214.00 | 193.00 | 165.00 | 147.00 | 93.00  | 84.00 | 181.00 | 259.00 | 340.00 |
| Salvajina | 1956 | 311.00 | 206.00 | 172.00 | 122.00 | 148.00 | 200.00 | 118.00 | 98.00  | 89.00 | 168.00 | 187.00 | 238.00 |
| Salvajina | 1957 | 184.00 | 96.00  | 131.00 | 136.00 | 196.00 | 165.00 | 90.00  | 64.00  | 46.00 | 65.00  | 104.00 | 182.00 |
| Salvajina | 1958 | 112.00 | 85.00  | 68.00  | 94.00  | 109.00 | 91.00  | 75.00  | 71.00  | 42.00 | 56.00  | 133.00 | 161.00 |
| Salvajina | 1959 | 139.00 | 84.00  | 63.00  | 78.00  | 120.00 | 128.00 | 108.00 | 59.00  | 52.00 | 88.00  | 129.00 | 177.00 |
| Salvajina | 1960 | 241.00 | 193.00 | 121.00 | 130.00 | 120.00 | 87.00  | 88.00  | 65.00  | 52.00 | 80.00  | 173.00 | 230.00 |
| Salvajina | 1961 | 111.00 | 91.00  | 78.00  | 142.00 | 89.00  | 119.00 | 101.00 | 72.00  | 42.00 | 62.00  | 206.00 | 149.00 |
| Salvajina | 1962 | 118.00 | 130.00 | 146.00 | 109.00 | 147.00 | 162.00 | 88.00  | 74.00  | 53.00 | 94.00  | 162.00 | 267.00 |
| Salvajina | 1963 | 121.00 | 218.00 | 152.00 | 228.00 | 209.00 | 132.00 | 94.00  | 82.00  | 49.00 | 60.00  | 213.00 | 153.00 |
| Salvajina | 1964 | 130.00 | 92.00  | 70.00  | 142.00 | 141.00 | 188.00 | 117.00 | 98.00  | 88.00 | 121.00 | 190.00 | 226.00 |
| Salvajina | 1965 | 163.00 | 106.00 | 78.00  | 126.00 | 142.00 | 74.00  | 77.00  | 55.00  | 45.00 | 95.00  | 208.00 | 240.00 |
| Salvajina | 1966 | 127.00 | 77.00  | 81.00  | 89.00  | 130.00 | 108.00 | 103.00 | 76.00  | 59.00 | 113.00 | 274.00 | 606.00 |
| Salvajina | 1967 | 195.00 | 199.00 | 188.00 | 132.00 | 137.00 | 160.00 | 121.00 | 92.00  | 50.00 | 77.00  | 246.00 | 164.00 |
| Salvajina | 1968 | 116.00 | 156.00 | 135.00 | 177.00 | 125.00 | 133.00 | 137.00 | 74.00  | 68.00 | 149.00 | 203.00 | 159.00 |
| Salvajina | 1969 | 126.00 | 141.00 | 88.00  | 207.00 | 180.00 | 127.00 | 92.00  | 62.00  | 47.00 | 161.00 | 194.00 | 175.00 |
| Salvajina | 1970 | 111.00 | 178.00 | 198.00 | 105.00 | 146.00 | 135.00 | 79.00  | 80.00  | 73.00 | 165.00 | 366.00 | 258.00 |
| Salvajina | 1971 | 310.00 | 235.00 | 229.00 | 238.00 | 212.00 | 137.00 | 123.00 | 83.00  | 86.00 | 137.00 | 216.00 | 180.00 |
| Salvajina | 1972 | 220.00 | 188.00 | 144.00 | 145.00 | 146.00 | 138.00 | 115.00 | 58.00  | 59.00 | 68.00  | 146.00 | 157.00 |

|           |      |        |        |        |        |        |        |        |        |        |        |        |        |
|-----------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Salvajina | 1973 | 71.00  | 50.00  | 53.00  | 81.00  | 104.00 | 111.00 | 107.00 | 122.00 | 150.00 | 197.00 | 288.00 | 287.00 |
| Salvajina | 1974 | 252.00 | 284.00 | 245.00 | 146.00 | 147.00 | 109.00 | 114.00 | 74.00  | 75.00  | 159.00 | 288.00 | 211.00 |
| Salvajina | 1975 | 126.00 | 188.00 | 188.00 | 131.00 | 185.00 | 145.00 | 141.00 | 109.00 | 110.00 | 156.00 | 307.00 | 398.00 |
| Salvajina | 1976 | 190.00 | 177.00 | 191.00 | 202.00 | 165.00 | 124.00 | 132.00 | 74.00  | 58.00  | 81.00  | 126.00 | 123.00 |
| Salvajina | 1977 | 75.00  | 59.00  | 52.00  | 82.00  | 116.00 | 100.00 | 74.00  | 57.00  | 80.00  | 158.00 | 208.00 | 126.00 |
| Salvajina | 1978 | 147.00 | 63.00  | 62.00  | 141.00 | 139.00 | 104.00 | 74.00  | 61.00  | 50.00  | 76.00  | 124.00 | 240.00 |
| Salvajina | 1979 | 136.00 | 84.00  | 145.00 | 142.00 | 148.00 | 161.00 | 83.00  | 63.00  | 91.00  | 129.00 | 207.00 | 146.00 |
| Salvajina | 1980 | 134.00 | 177.00 | 128.00 | 103.00 | 105.00 | 103.00 | 71.00  | 49.00  | 49.00  | 100.00 | 143.00 | 205.00 |
| Salvajina | 1981 | 124.00 | 116.00 | 154.00 | 216.00 | 242.00 | 149.00 | 122.00 | 63.00  | 55.00  | 66.00  | 207.00 | 195.00 |
| Salvajina | 1982 | 241.00 | 185.00 | 235.00 | 234.00 | 229.00 | 129.00 | 114.00 | 73.00  | 64.00  | 112.00 | 173.00 | 194.00 |
| Salvajina | 1983 | 122.00 | 114.00 | 117.00 | 232.00 | 176.00 | 116.00 | 71.00  | 74.00  | 46.00  | 74.00  | 119.00 | 201.00 |
| Salvajina | 1984 | 237.00 | 195.00 | 152.00 | 173.00 | 213.00 | 174.00 | 119.00 | 82.00  | 100.00 | 211.00 | 279.00 | 264.00 |
| Salvajina | 1985 | 259.00 | 124.00 | 88.00  | 131.00 | 163.00 | 129.00 | 102.00 | 83.00  | 78.00  | 133.00 | 206.00 | 180.00 |
| Salvajina | 1986 | 169.00 | 202.00 | 198.00 | 161.00 | 144.00 | 147.00 | 126.00 | 59.00  | 58.00  | 160.00 | 187.00 | 140.00 |
| Salvajina | 1987 | 93.00  | 63.00  | 60.00  | 84.00  | 130.00 | 82.00  | 74.00  | 69.00  | 46.00  | 115.00 | 142.00 | 124.00 |
| Salvajina | 1988 | 72.00  | 73.00  | 71.00  | 106.00 | 101.00 | 121.00 | 168.00 | 73.00  | 94.00  | 113.00 | 354.00 | 324.00 |
| Salvajina | 1989 | 249.00 | 223.00 | 223.00 | 128.00 | 172.00 | 122.00 | 107.00 | 58.00  | 64.00  | 96.00  | 128.00 | 148.00 |
| Salvajina | 1990 | 196.00 | 150.00 | 132.00 | 167.00 | 185.00 | 105.00 | 88.00  | 76.00  | 49.00  | 84.00  | 123.00 | 152.00 |
| Salvajina | 1991 | 147.00 | 80.00  | 125.00 | 144.00 | 126.00 | 97.00  | 114.00 | 97.00  | 69.00  | 67.00  | 150.00 | 176.00 |
| Salvajina | 1992 | 121.00 | 104.00 | 69.00  | 82.00  | 74.00  | 67.00  | 92.00  | 63.00  | 40.00  | 42.00  | 103.00 | 175.00 |
| Salvajina | 1993 | 160.00 | 127.00 | 139.00 | 165.00 | 166.00 | 109.00 | 86.00  | 61.00  | 52.00  | 62.00  | 180.00 | 239.00 |
| Salvajina | 1994 | 211.00 | 157.00 | 153.00 | 186.00 | 149.00 | 117.00 | 95.00  | 85.00  | 56.00  | 97.00  | 180.00 | 192.00 |
| Salvajina | 1995 | 112.00 | 77.00  | 89.00  | 146.00 | 148.00 | 107.00 | 94.00  | 83.00  | 59.00  | 134.00 | 164.00 | 196.00 |
| Salvajina | 1996 | 186.00 | 205.00 | 206.00 | 164.00 | 144.00 | 127.00 | 145.00 | 73.00  | 51.00  | 125.00 | 148.00 | 187.00 |
| Salvajina | 1997 | 319.00 | 201.00 | 137.00 | 136.00 | 125.00 | 125.00 | 141.00 | 58.00  | 42.00  | 55.00  | 114.00 | 88.00  |
| Salvajina | 1998 | 44.00  | 61.00  | 55.00  | 113.00 | 129.00 | 134.00 | 89.00  | 60.00  | 49.00  | 95.00  | 269.00 | 210.00 |
| Salvajina | 1999 | 273.00 | 307.00 | 234.00 | 252.00 | 160.00 | 119.00 | 97.00  | 71.00  | 98.00  | 137.00 | 291.00 | 389.00 |
| Salvajina | 2000 | 329.00 | 261.00 | 261.00 | 211.00 | 198.00 | 157.00 | 112.00 | 108.00 | 92.00  | 86.00  | 165.00 | 136.00 |
| Salvajina | 2001 | 99.36  | 80.64  | 123.50 | 85.28  | 92.50  | 102.51 | 68.33  | 65.78  | 54.90  | 62.03  | 126.26 | 230.12 |
| Salvajina | 2002 | 130.13 | 67.16  | 80.04  | 161.35 | 117.24 | 115.18 | 75.91  | 62.38  | 38.16  | 59.84  | 92.90  | 124.18 |
| Salvajina | 2003 | 67.74  | 58.08  | 81.26  | 131.65 | 113.70 | 116.08 | 92.17  | 49.10  | 45.02  | 100.10 | 153.85 | 156.14 |
| Salvajina | 2004 | 168.21 | 86.29  | 73.38  | 124.06 | 111.26 | 93.24  | 67.69  | 60.88  | 41.46  | 98.60  | 233.73 | 202.98 |
| Salvajina | 2005 | 155.31 | 186.31 | 182.09 | 124.31 | 129.83 | 85.70  | 66.49  | 58.33  | 50.14  | 116.09 | 212.19 | 243.09 |
| Salvajina | 2006 | 191.61 | 163.76 | 191.98 | 204.39 | 182.18 | 149.21 | 89.80  | 58.23  | 47.96  | 64.23  | 144.82 | 210.59 |
| Salvajina | 2007 | 121.95 | 77.85  | 118.00 | 202.75 | 200.52 | 168.92 | 75.37  | 70.15  | 50.82  | 141.13 | 227.48 | 317.00 |
| Salvajina | 2008 | 208.74 | 234.64 | 210.87 | 194.76 | 215.05 | 161.19 | 143.33 | 98.65  | 100.04 | 123.93 | 294.64 | 270.67 |

## Formato 5. Embalses

| Nombre         | Mínimo Técnico (Mm3) | Máximo Técnico (Mm3) |
|----------------|----------------------|----------------------|
| Alto Anchicaya | 6.08                 | 37.61                |
| Calima         | 104.91               | 511.30               |
| Prado          | 325.08               | 668.88               |

|           |        |        |
|-----------|--------|--------|
| Salvajina | 101.13 | 796.82 |
|-----------|--------|--------|

## Formato 6. Filtraciones

Formato No Registrado

## Formato 7. Curvas de Operación Embalses

| Embalse        | Mes | Volumen Espera (Mm3) | Curva Guía Mínima (Mm3) | Curva Guía Máxima (Mm3) |
|----------------|-----|----------------------|-------------------------|-------------------------|
| Alto Anchicaya | 1   |                      |                         |                         |
| Alto Anchicaya | 2   |                      |                         |                         |
| Alto Anchicaya | 3   |                      |                         |                         |
| Alto Anchicaya | 4   |                      |                         |                         |
| Alto Anchicaya | 5   |                      |                         |                         |
| Alto Anchicaya | 6   |                      |                         |                         |
| Alto Anchicaya | 7   |                      |                         |                         |
| Alto Anchicaya | 8   |                      |                         |                         |
| Alto Anchicaya | 9   |                      |                         |                         |
| Alto Anchicaya | 10  |                      |                         |                         |
| Alto Anchicaya | 11  |                      |                         |                         |
| Alto Anchicaya | 12  |                      |                         |                         |
| Calima         | 1   |                      |                         |                         |
| Calima         | 2   |                      |                         |                         |
| Calima         | 3   |                      |                         |                         |
| Calima         | 4   |                      |                         |                         |
| Calima         | 5   |                      |                         |                         |
| Calima         | 6   |                      |                         |                         |
| Calima         | 7   |                      |                         |                         |
| Calima         | 8   |                      |                         |                         |
| Calima         | 9   |                      |                         |                         |
| Calima         | 10  |                      |                         |                         |
| Calima         | 11  |                      |                         |                         |
| Calima         | 12  |                      |                         |                         |
| Prado          | 1   |                      | 325.08                  |                         |
| Prado          | 2   |                      | 325.08                  |                         |
| Prado          | 3   |                      | 325.08                  |                         |
| Prado          | 4   |                      | 325.08                  |                         |
| Prado          | 5   |                      | 325.08                  |                         |

|           |    |  |        |        |
|-----------|----|--|--------|--------|
| Prado     | 6  |  | 325.08 |        |
| Prado     | 7  |  | 325.08 |        |
| Prado     | 8  |  | 325.08 |        |
| Prado     | 9  |  | 325.08 |        |
| Prado     | 10 |  | 325.08 |        |
| Prado     | 11 |  | 325.08 |        |
| Prado     | 12 |  | 325.08 |        |
| Salvajina | 1  |  | 196.12 | 619.92 |
| Salvajina | 2  |  | 196.12 | 619.92 |
| Salvajina | 3  |  | 196.12 | 710.56 |
| Salvajina | 4  |  | 196.12 | 751.09 |
| Salvajina | 5  |  | 214.62 | 770.81 |
| Salvajina | 6  |  | 238.56 | 790.36 |
| Salvajina | 7  |  | 263.05 | 790.36 |
| Salvajina | 8  |  | 238.56 | 751.09 |
| Salvajina | 9  |  | 214.62 | 594.46 |
| Salvajina | 10 |  | 196.12 | 414.95 |
| Salvajina | 11 |  | 196.12 | 466.35 |
| Salvajina | 12 |  | 196.12 | 619.92 |

### **Formato 8.** Capacidad Arcos de Descarga

Formato No Registrado

### **Formato 9.** Arco de Bombeo

Formato No Registrado

### **Formato 10.** Capacidad Máxima Arco Generación

| <b>Nombre</b>  | <b>Flujo Mínimo (m3/s)</b> | <b>Flujo Máximo (m3/s)</b> |
|----------------|----------------------------|----------------------------|
| Alto Anchicaya | 0.00                       | 100.03                     |
| Bajo Anchicaya | 0.00                       | 105.65                     |
| Calima         | 0.00                       | 73.21                      |
| Prado          | 0.00                       | 93.80                      |
| Salvajina      | 0.00                       | 285.06                     |

**Formato 11. Descarga Máxima Embalse Bogotá**  
Formato No Registrado

**Formato 12. Capacidad Túneles Chivor**  
Formato No Registrado

**Formato 13. Demanda Acueducto y Riego**

| Nombre | Año T (m3/s) | Año T+1 (m3/s) | Año T+2 (m3/s) | Año T+3 (m3/s) | Año T+4 (m3/s) | Año T+5 (m3/s) | Factor Recuperación |
|--------|--------------|----------------|----------------|----------------|----------------|----------------|---------------------|
| PRADO  | 8.48         | 8.48           | 8.48           | 8.48           | 8.48           | 8.48           | 0                   |

**Formato 14. Suministro Gas Natural**

| Planta     | Campo   | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|------------|---------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| Termovalle | Guajira | 8,760.00        | 1,116,000.00             | 1,116,000.00         | 1,008,000.00           | 1,116,000.00         | 1,080,000.00         | 1,116,000.00        | 1,080,000.00         | 1,116,000.00         | 1,116,000.00          | 1,080,000.00              | 1,116,000.00           | 1,080,000.00             |

**Formato 15. Transporte Gas Natural**

| Planta     | Punto Entrada   | Punto Salida | Transporte Diciembre (MBTU) | Transporte Enero (MBTU) | Transporte Febrero (MBTU) | Transporte Marzo (MBTU) | Transporte Abril (MBTU) | Transporte Mayo (MBTU) | Transporte Junio (MBTU) | Transporte Julio (MBTU) | Transporte Agosto (MBTU) | Transporte Septiembre (MBTU) | Transporte Octubre (MBTU) | Transporte Noviembre (MBTU) |
|------------|-----------------|--------------|-----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|
| Termovalle | Barrancabermeja | Cali         | 1,116,000.00                | 1,116,000.00            | 1,008,000.00              | 1,116,000.00            | 1,080,000.00            | 1,116,000.00           | 1,080,000.00            | 1,116,000.00            | 1,116,000.00             | 1,080,000.00                 | 1,116,000.00              | 1,080,000.00                |

**Formato 16. Suministro Combustible Diferente a Gas**  
Formato No Registrado

**Formato 17. Almacenamiento Combustible**  
Formato No Registrado

**Formato 18. Energía Contratada**  
Formato No Registrado

**Formato 19. Plantas Menores**

| Nombre           | Capacidad Efectiva Neta (MW) | Disponibilidad (%) |
|------------------|------------------------------|--------------------|
| Central Castilla | 1.00                         | 0.00               |
| Central Tumaco   | 0.00                         | 0.00               |
| Incauca          | 9.90                         | 0.00               |
| Nima             | 6.70                         | 17.33              |
| Prado4           | 5.00                         | 0.57               |
| Providencia      | 1.00                         | 0.00               |
| Rio Cali         | 1.80                         | 24.38              |
| Rio Paila        | 1.50                         | 0.00               |

Empresas Públicas De Medellín E.S.P.

Formato 1. Plantas o Unidades Hidráulicas

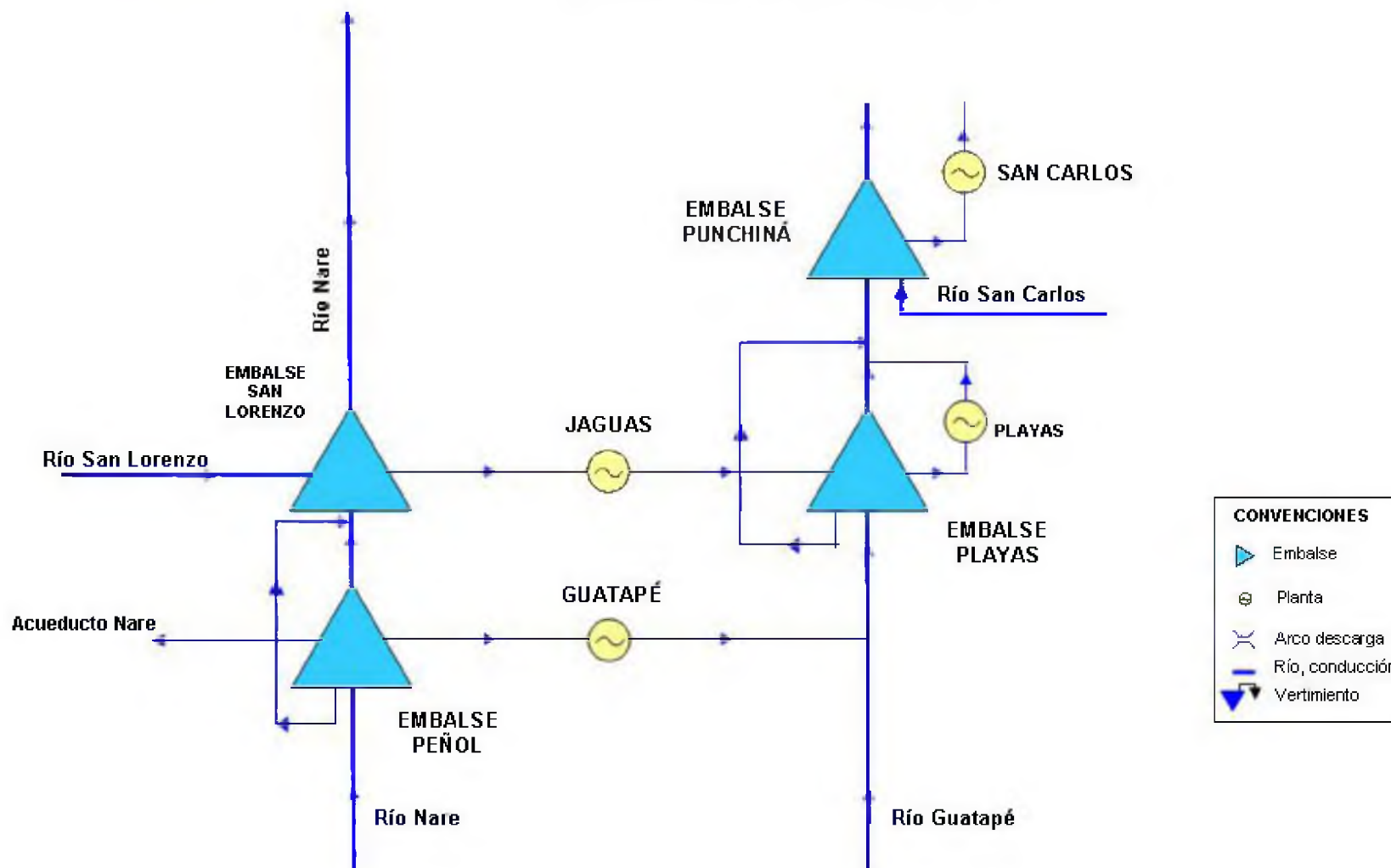
| Nombre     | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|------------|------------------------------|----------------------|---------|
| GUADALUPE3 | 270.00                       | 5.1553               | 0.2273  |
| GUADALUPE4 | 202.00                       | 4.1852               | 4.9066  |
| GUATAPE    | 560.00                       | 7.7110               | 0.1319  |
| LATASAJERA | 306.00                       | 7.7309               | 0.0892  |
| PLAYAS     | 201.00                       | 1.5880               | 0.2650  |
| PORCE2     | 405.00                       | 1.9773               | 0.0619  |
| TRONERAS   | 40.00                        | 0.7254               | 0.0952  |

Formato 2. Topología Plantas Hidráulicas

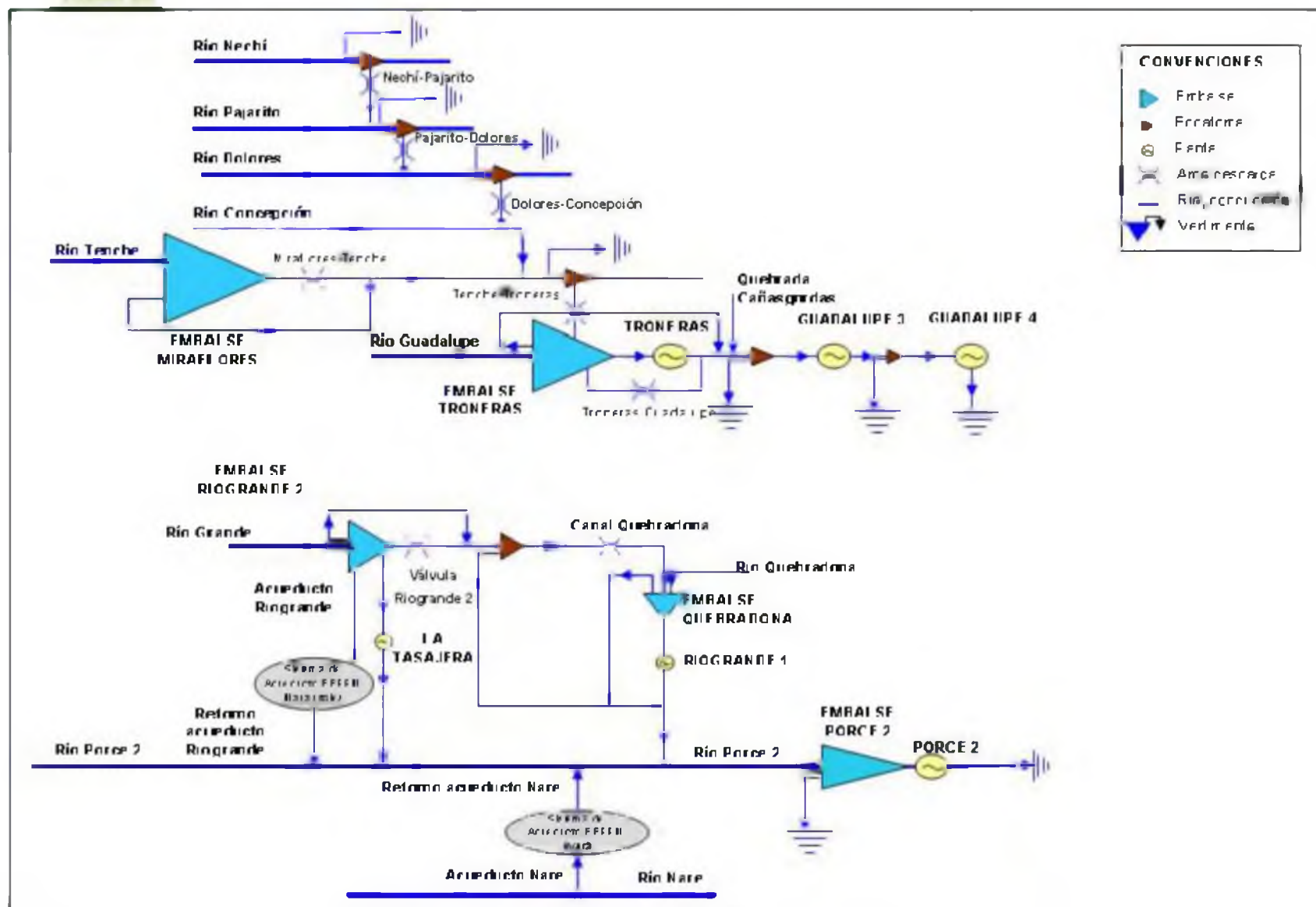
| Nombre Sistema | Elemento Clase | Elemento Nombre    | Aportes Rio  | Aportes Embalse | Aportes Planta  | Aportes Otro                                   | Descargas Rio | Descargas Embalse | Descargas Planta | Descargas Otro     | Vertimiento s Rio | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro |
|----------------|----------------|--------------------|--------------|-----------------|-----------------|------------------------------------------------|---------------|-------------------|------------------|--------------------|-------------------|-----------------------|----------------------|--------------------|
| Guatape        | F              | Acueducto NARE     |              | PENOL           |                 |                                                |               | Porce2            |                  |                    |                   |                       |                      |                    |
| Guatape        | P              | Playas             |              | PLAYAS          |                 |                                                |               | Punchina          |                  |                    |                   |                       |                      |                    |
| Guatape        | E              | Playas             | GUATAPE      |                 | GUATAPE+ JAGUAS |                                                |               |                   | PLAYAS           |                    |                   | Punchina              |                      |                    |
| Guatape        | P              | Guatape            |              | PENOL           |                 |                                                |               | Playas            |                  |                    |                   |                       |                      |                    |
| Guatape        | E              | Penol              | NARE         |                 |                 |                                                |               |                   | GUATAPE          | Acueducto Nare     |                   | San Lorenzo           |                      |                    |
| Guatron        | P              | Troneras           |              | TRONERAS        |                 |                                                |               |                   | GUADALUP E3      |                    |                   |                       |                      |                    |
| Guatron        | AD             | Troneras-Guadalupe |              | TRONERAS        |                 |                                                |               |                   | GUADALUP E3      |                    |                   |                       |                      |                    |
| Guatron        | P              | Guadalupe3         | CANASGO RDAS |                 | TRONERAS        | Troneras-Guadalupe+ VertimientoEmbalseTroneras |               |                   | GUADALUP E4      |                    |                   | Tierra                |                      |                    |
| Guatron        | P              | Guadalupe4         |              |                 | GUADALUP E3     |                                                |               | Tierra            |                  |                    |                   | Tierra                |                      |                    |
| Guatron        | E              | Troneras           | GUADALUP E   |                 |                 | Tenche-Troneras                                |               |                   | TRONERAS         | Troneras-Guadalupe |                   |                       | GUADALUP E3          |                    |
| Guatron        | AD             | Dolores-Concepcion | DOLORES      |                 |                 | Pajarito-Dolores                               |               |                   |                  | Tenche-Troneras    |                   |                       |                      | Tierra             |
| Guatron        | AD             | Pajarito-Dolores   | PAJARITO     |                 |                 | Nechi-Pajarito                                 |               |                   |                  | Dolores-Concepcion |                   |                       |                      | Tierra             |

|         |    |                    |            |            |                       |                                                                                        |  |            |            |                                     |  |        |  |                  |
|---------|----|--------------------|------------|------------|-----------------------|----------------------------------------------------------------------------------------|--|------------|------------|-------------------------------------|--|--------|--|------------------|
| Guatron | AD | Miraflores-Tenche  |            | MIRAFLORES |                       |                                                                                        |  |            |            | Tenche-Troneras                     |  |        |  |                  |
| Guatron | AD | Tenche-Troneras    | CONCEPCION |            |                       | Dolores-Concepcion+Miraflores-Tenche+VertimientoEmbalseMiraflores                      |  | Troneras   |            |                                     |  |        |  | Tierra           |
| Guatron | AD | Nechi-Pajarito     | NECHI      |            |                       |                                                                                        |  |            |            | Pajarito-Dolores                    |  |        |  | Tierra           |
| Guatron | E  | Miraflores         | TENCHE     |            |                       |                                                                                        |  |            |            | Miraflores-Tenche                   |  |        |  | Tenche-Troneras  |
| Porce   | P  | Latasajera         |            | RIOGRANDE2 |                       |                                                                                        |  | Porce2     |            |                                     |  |        |  |                  |
| Porce   | AD | Valvula Riogrande2 |            | RIOGRANDE2 |                       |                                                                                        |  |            |            | Canal Quebradona                    |  |        |  |                  |
| Porce   | AD | Canal Quebradona   |            |            |                       | Valvula Riogrande2+VertimientoEmbalseRiogrande2                                        |  | Quebradona |            |                                     |  | Porce2 |  |                  |
| Porce   | E  | Quebradona         | QUEBRADONA |            |                       | Canal Quebradona                                                                       |  |            | RIOGRANDE1 |                                     |  | Porce2 |  |                  |
| Porce   | F  | Acueducto GRANDE   |            | RIOGRANDE2 |                       |                                                                                        |  | Porce2     |            |                                     |  |        |  |                  |
| Porce   | E  | Porce2             | PORCE2     |            | LATASAJERA+RIOGRANDE1 | Acueducto Nare+AcueductoGrande+VertimientoCanalQuebradona+VertimientoEmbalseQuebradona |  |            | PORCE2     |                                     |  | Tierra |  |                  |
| Porce   | P  | Porce2             |            | PORCE2     |                       |                                                                                        |  | Tierra     |            |                                     |  |        |  |                  |
| Porce   | E  | Riogrande2         | GRANDE     |            |                       |                                                                                        |  |            | LATASAJERA | Valvula Riogrande2+Acueducto Grande |  |        |  | Canal Quebradona |
| Porce   | P  | Riogrande1         |            | QUEBRADONA |                       |                                                                                        |  | Porce2     |            |                                     |  |        |  |                  |

## CADENA GUATAPÉ - PLAYAS



## CADENA HIDRÁULICA PORCE



**Formato 3.** Plantas o Unidades Térmicas

| Nombre           | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|------------------|------------------------------|-----------------------|---------|
| TERMOSIERRA ACPM | 359.21                       | 6.6727                | 6.8674  |
| TERMOSIERRA GAS  | 460.01                       | 6.2712                | 6.8674  |

**Formato 4.** Caudal Medio Mensual

| Rio          | Año  | Caudal Enero (m3/s) | Caudal Febrero (m3/s) | Caudal Marzo (m3/s) | Caudal Abril (m3/s) | Caudal Mayo (m3/s) | Caudal Junio (m3/s) | Caudal Julio (m3/s) | Caudal Agosto (m3/s) | Caudal Septiembre (m3/s) | Caudal Octubre (m3/s) | Caudal Noviembre (m3/s) | Caudal Diciembre (m3/s) |
|--------------|------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| CANASGOR DAS | 1937 |                     |                       |                     |                     |                    |                     |                     |                      |                          | 0.97                  | 1.06                    | 1.05                    |
| CANASGOR DAS | 1938 | 0.59                | 0.50                  | 0.61                | 1.29                | 1.42               | 1.72                | 1.56                | 1.93                 | 1.45                     | 1.36                  | 1.30                    | 1.03                    |
| CANASGOR DAS | 1939 | 0.67                | 0.49                  | 0.54                | 0.99                | 0.99               | 1.17                | 1.14                | 1.30                 | 1.39                     | 1.32                  | 1.11                    | 1.17                    |
| CANASGOR DAS | 1940 | 0.60                | 0.61                  | 0.56                | 0.57                | 0.74               | 1.01                | 0.57                | 0.81                 | 1.11                     | 0.86                  | 0.84                    | 0.76                    |
| CANASGOR DAS | 1941 | 0.46                | 0.47                  | 0.42                | 0.77                | 0.79               | 0.73                | 1.32                | 1.88                 | 1.47                     | 1.27                  | 0.95                    | 1.04                    |
| CANASGOR DAS | 1942 | 0.57                | 0.66                  | 0.72                | 1.18                | 1.50               | 1.11                | 1.27                | 1.46                 | 1.24                     | 1.34                  | 1.21                    | 0.90                    |
| CANASGOR DAS | 1943 | 0.69                | 0.60                  | 0.64                | 1.23                | 1.65               | 1.30                | 0.90                | 0.96                 | 1.11                     | 1.45                  | 0.96                    | 0.65                    |
| CANASGOR DAS | 1944 | 0.52                | 0.50                  | 0.53                | 0.53                | 1.36               | 1.32                | 0.83                | 0.89                 | 1.30                     | 1.41                  | 1.28                    | 0.82                    |
| CANASGOR DAS | 1945 | 0.63                | 0.55                  | 0.74                | 0.90                | 1.39               | 1.05                | 1.49                | 2.16                 | 1.18                     | 1.67                  | 1.24                    | 1.08                    |
| CANASGOR DAS | 1946 | 0.82                | 0.64                  | 0.84                | 1.48                | 1.34               | 1.14                | 1.05                | 1.28                 | 1.48                     | 1.19                  | 1.04                    | 0.86                    |
| CANASGOR DAS | 1947 | 0.91                | 0.70                  | 0.61                | 0.94                | 1.17               | 1.40                | 1.27                | 1.05                 | 1.48                     | 1.37                  | 1.01                    | 0.81                    |
| CANASGOR DAS | 1948 | 0.78                | 0.54                  | 0.56                | 1.04                | 1.14               | 1.36                | 0.90                | 1.04                 | 1.10                     | 1.09                  | 1.01                    | 0.77                    |
| CANASGOR DAS | 1949 | 0.55                | 0.45                  | 0.57                | 0.74                | 1.18               | 1.25                | 1.47                | 1.54                 | 1.26                     | 1.23                  | 1.08                    | 0.92                    |
| CANASGOR DAS | 1950 | 0.74                | 0.73                  | 0.70                | 0.62                | 1.16               | 1.63                | 1.49                | 1.94                 | 1.28                     | 1.44                  | 1.34                    | 1.20                    |
| CANASGOR DAS | 1951 | 0.86                | 1.09                  | 0.80                | 1.23                | 1.25               | 1.28                | 1.44                | 1.32                 | 1.67                     | 1.13                  | 1.02                    | 0.90                    |
| CANASGOR DAS | 1952 | 0.59                | 0.51                  | 0.43                | 0.70                | 1.07               | 1.14                | 1.45                | 1.64                 | 1.51                     | 1.42                  | 1.22                    | 0.95                    |
| CANASGOR DAS | 1953 | 0.81                | 0.64                  | 0.63                | 0.88                | 1.43               | 1.15                | 1.04                | 0.70                 | 0.87                     | 0.80                  | 0.96                    | 0.69                    |
| CANASGOR DAS | 1954 | 0.69                | 0.55                  | 0.57                | 1.23                | 1.40               | 1.58                | 1.71                | 1.31                 | 1.48                     | 1.90                  | 1.40                    | 0.94                    |

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CANASGOR<br>DAS | 1955 | 0.82 | 0.69 | 0.88 | 1.13 | 1.46 | 1.34 | 1.52 | 1.43 | 1.45 | 1.85 | 1.50 | 0.93 |
| CANASGOR<br>DAS | 1956 | 0.78 | 0.79 | 0.84 | 1.11 | 1.86 | 2.11 | 1.32 | 1.75 | 1.47 | 1.66 | 1.57 | 1.03 |
| CANASGOR<br>DAS | 1957 | 0.69 | 0.82 | 0.59 | 0.76 | 1.13 | 1.17 | 1.17 | 1.28 | 1.20 | 1.30 | 1.04 | 0.81 |
| CANASGOR<br>DAS | 1958 | 0.54 | 0.46 | 0.52 | 0.49 | 1.02 | 0.67 | 0.60 | 1.09 | 0.67 | 0.85 | 0.65 | 0.66 |
| CANASGOR<br>DAS | 1959 | 0.46 | 0.37 | 0.47 | 0.63 | 0.93 | 1.20 | 1.52 | 1.19 | 1.63 | 1.72 | 1.60 | 1.01 |
| CANASGOR<br>DAS | 1960 | 0.74 | 0.61 | 0.49 | 0.86 | 1.08 | 1.32 | 1.30 | 1.30 | 1.55 | 1.45 | 1.26 | 0.91 |
| CANASGOR<br>DAS | 1961 | 0.57 | 0.48 | 0.49 | 0.69 | 0.82 | 1.16 | 1.11 | 0.94 | 1.31 | 1.09 | 1.43 | 0.84 |
| CANASGOR<br>DAS | 1962 | 0.63 | 0.55 | 0.59 | 0.73 | 1.48 | 1.45 | 1.37 | 1.41 | 1.59 | 1.21 | 1.16 | 0.69 |
| CANASGOR<br>DAS | 1963 | 0.54 | 0.58 | 0.71 | 1.09 | 1.21 | 1.03 | 1.90 | 1.35 | 1.22 | 1.25 | 1.24 | 0.60 |
| CANASGOR<br>DAS | 1964 | 0.50 | 0.48 | 0.52 | 0.99 | 0.85 | 0.87 | 1.53 | 1.16 | 1.46 | 1.31 | 1.08 | 0.74 |
| CANASGOR<br>DAS | 1965 | 0.57 | 0.48 | 0.53 | 0.70 | 1.15 | 0.92 | 0.85 | 1.04 | 1.44 | 1.24 | 1.10 | 0.72 |
| CANASGOR<br>DAS | 1966 | 0.71 | 0.51 | 0.56 | 0.75 | 0.64 | 1.12 | 0.83 | 0.98 | 1.00 | 1.00 | 0.90 | 0.85 |
| CANASGOR<br>DAS | 1967 | 0.60 | 0.55 | 0.51 | 1.02 | 1.55 | 1.71 | 1.55 | 1.08 | 1.23 | 0.96 | 0.70 | 0.55 |
| CANASGOR<br>DAS | 1968 | 0.46 | 0.40 | 0.58 | 0.70 | 0.95 | 1.22 | 1.28 | 1.21 | 1.44 | 1.24 | 1.11 | 0.71 |
| CANASGOR<br>DAS | 1969 | 0.56 | 0.53 | 0.49 | 0.81 | 0.88 | 0.71 | 0.54 | 1.32 | 1.43 | 1.66 | 1.24 | 0.99 |
| CANASGOR<br>DAS | 1970 | 1.04 | 0.84 | 0.93 | 1.19 | 1.51 | 1.41 | 1.30 | 1.23 | 1.75 | 2.03 | 1.63 | 1.26 |
| CANASGOR<br>DAS | 1971 | 1.24 | 1.19 | 1.36 | 1.13 | 1.55 | 1.60 | 1.86 | 2.25 | 1.71 | 1.73 | 1.22 | 0.81 |
| CANASGOR<br>DAS | 1972 | 0.84 | 0.64 | 0.65 | 1.05 | 1.74 | 1.56 | 1.19 | 1.49 | 1.49 | 1.16 | 0.99 | 0.81 |
| CANASGOR<br>DAS | 1973 | 0.53 | 0.45 | 0.53 | 0.54 | 1.09 | 1.23 | 1.07 | 1.10 | 1.55 | 1.26 | 1.41 | 1.02 |
| CANASGOR<br>DAS | 1974 | 0.67 | 0.60 | 0.62 | 0.79 | 1.44 | 1.09 | 1.18 | 1.44 | 1.75 | 1.65 | 1.45 | 0.78 |
| CANASGOR<br>DAS | 1975 | 0.59 | 0.52 | 0.65 | 0.72 | 1.17 | 1.74 | 1.86 | 1.87 | 1.85 | 2.07 | 1.64 | 1.26 |
| CANASGOR<br>DAS | 1976 | 0.82 | 0.64 | 0.75 | 1.22 | 1.50 | 1.24 | 0.98 | 1.26 | 1.17 | 1.35 | 1.01 | 0.61 |
| CANASGOR<br>DAS | 1977 | 0.49 | 0.48 | 0.43 | 0.49 | 0.78 | 1.24 | 1.48 | 1.46 | 1.16 | 1.25 | 1.04 | 0.73 |
| CANASGOR<br>DAS | 1978 | 0.62 | 0.57 | 0.57 | 1.09 | 1.10 | 1.51 | 1.26 | 0.94 | 1.17 | 1.24 | 0.99 | 0.91 |
| CANASGOR<br>DAS | 1979 | 0.58 | 0.50 | 0.48 | 0.77 | 0.90 | 1.18 | 0.62 | 0.83 | 1.00 | 1.46 | 1.39 | 0.83 |
| CANASGOR<br>DAS | 1980 | 0.61 | 0.52 | 0.47 | 0.47 | 0.87 | 1.16 | 1.24 | 1.21 | 0.96 | 1.36 | 1.36 | 0.82 |
| CANASGOR<br>DAS | 1981 | 0.56 | 0.53 | 0.52 | 0.76 | 1.77 | 1.64 | 1.74 | 1.05 | 1.14 | 1.24 | 1.06 | 0.73 |

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CANASGOR<br>DAS | 1982 | 0.60 | 0.68 | 0.65 | 1.06 | 1.46 | 1.03 | 1.10 | 1.13 | 1.15 | 1.56 | 0.95 | 0.72 |
| CANASGOR<br>DAS | 1983 | 0.44 | 0.42 | 0.52 | 0.83 | 1.41 | 1.09 | 1.63 | 1.29 | 1.53 | 1.28 | 0.89 | 0.91 |
| CANASGOR<br>DAS | 1984 | 0.66 | 0.70 | 0.45 | 0.56 | 0.88 | 1.41 | 1.18 | 1.07 | 1.60 | 1.68 | 1.55 | 0.94 |
| CANASGOR<br>DAS | 1985 | 0.65 | 0.51 | 0.67 | 0.61 | 0.98 | 0.75 | 0.82 | 1.46 | 1.55 | 1.18 | 0.88 | 0.72 |
| CANASGOR<br>DAS | 1986 | 0.59 | 0.59 | 0.58 | 0.88 | 0.90 | 1.15 | 0.81 | 0.89 | 0.83 | 1.31 | 0.79 | 0.58 |
| CANASGOR<br>DAS | 1987 | 0.42 | 0.37 | 0.38 | 0.62 | 0.88 | 0.72 | 0.76 | 1.05 | 1.56 | 1.31 | 0.98 | 0.76 |
| CANASGOR<br>DAS | 1988 | 0.51 | 0.51 | 0.44 | 0.55 | 0.81 | 0.74 | 0.85 | 1.32 | 1.31 | 1.35 | 1.34 | 0.87 |
| CANASGOR<br>DAS | 1989 | 0.81 | 0.70 | 0.73 | 0.75 | 0.89 | 1.42 | 1.08 | 1.44 | 1.56 | 1.71 | 1.06 | 0.89 |
| CANASGOR<br>DAS | 1990 | 0.62 | 0.66 | 0.64 | 0.79 | 1.17 | 1.24 | 1.17 | 0.80 | 1.00 | 1.56 | 1.19 | 0.80 |
| CANASGOR<br>DAS | 1991 | 0.89 | 0.77 | 0.88 | 0.95 | 1.41 | 1.26 | 1.51 | 1.06 | 0.87 | 1.13 | 1.02 | 0.86 |
| CANASGOR<br>DAS | 1992 | 0.67 | 0.61 | 0.60 | 0.66 | 0.93 | 0.82 | 0.96 | 1.27 | 1.48 | 1.16 | 0.99 | 0.73 |
| CANASGOR<br>DAS | 1993 | 0.64 | 0.54 | 0.58 | 0.40 | 0.51 | 0.84 | 1.25 | 1.49 | 1.88 | 1.93 | 1.35 | 1.33 |
| CANASGOR<br>DAS | 1994 | 0.77 | 0.77 | 0.70 | 1.21 | 1.58 | 1.68 | 1.12 | 2.40 | 1.68 | 1.07 | 1.62 | 0.95 |
| CANASGOR<br>DAS | 1995 | 0.60 | 0.51 | 0.55 | 0.80 | 1.08 | 1.27 | 1.72 | 1.57 | 1.32 | 1.26 | 0.78 | 1.24 |
| CANASGOR<br>DAS | 1996 | 0.78 | 0.84 | 0.92 | 1.14 | 1.91 | 1.36 | 1.63 | 1.50 | 1.57 | 1.48 | 1.34 | 0.93 |
| CANASGOR<br>DAS | 1997 | 0.56 | 0.80 | 0.63 | 1.15 | 0.78 | 1.41 | 0.49 | 0.47 | 0.86 | 0.57 | 0.52 | 0.35 |
| CANASGOR<br>DAS | 1998 | 0.29 | 0.31 | 0.33 | 0.66 | 0.77 | 1.35 | 1.75 | 1.19 | 1.76 | 1.16 | 1.02 | 1.12 |
| CANASGOR<br>DAS | 1999 | 0.77 | 0.93 | 0.95 | 1.40 | 1.57 | 1.62 | 1.55 | 1.50 | 1.59 | 1.60 | 1.21 | 0.89 |
| CANASGOR<br>DAS | 2000 | 0.62 | 0.65 | 0.59 | 0.68 | 1.21 | 1.47 | 1.77 | 1.65 | 1.68 | 1.28 | 0.98 | 0.93 |
| CANASGOR<br>DAS | 2001 | 0.67 | 0.55 | 0.63 | 0.82 | 1.56 | 1.62 | 1.41 | 1.04 | 1.38 | 1.16 | 1.40 | 1.23 |
| CANASGOR<br>DAS | 2002 | 0.68 | 0.56 | 0.55 | 0.86 | 1.11 | 1.30 | 0.69 | 0.68 | 0.82 | 0.71 | 0.66 | 0.64 |
| CANASGOR<br>DAS | 2003 | 0.41 | 0.47 | 0.48 | 0.92 | 1.57 | 1.43 | 0.95 | 1.08 | 1.08 | 1.23 | 1.08 | 0.93 |
| CANASGOR<br>DAS | 2004 | 0.63 | 0.52 | 0.55 | 0.71 | 1.10 | 0.99 | 1.45 | 0.96 | 1.29 | 1.10 | 1.24 | 0.77 |
| CANASGOR<br>DAS | 2005 | 0.59 | 0.48 | 0.47 | 0.90 | 0.96 | 1.10 | 0.79 | 0.74 | 0.95 | 1.03 | 1.35 | 0.70 |
| CANASGOR<br>DAS | 2006 | 0.54 | 0.52 | 0.64 | 0.98 | 1.46 | 1.38 | 0.82 | 0.97 | 1.39 | 1.21 | 1.42 | 0.97 |
| CANASGOR<br>DAS | 2007 | 0.71 | 0.49 | 0.51 | 1.14 | 1.82 | 1.50 | 1.30 | 1.83 | 1.46 | 1.77 | 1.30 | 0.85 |
| CANASGOR<br>DAS | 2008 | 0.64 | 0.69 | 0.59 | 0.58 | 0.84 | 1.53 | 2.01 | 1.32 | 1.55 | 1.67 | 1.43 | 0.83 |

|            |      |      |      |      |      |       |       |       |       |       |       |       |       |
|------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| CONCEPCION | 1955 | 6.10 | 4.73 | 5.15 | 6.65 | 8.78  | 9.65  | 10.70 | 9.54  | 10.49 | 13.30 | 10.42 | 7.90  |
| CONCEPCION | 1956 | 7.25 | 6.86 | 6.11 | 7.24 | 10.06 | 12.13 | 8.54  | 11.01 | 9.46  | 11.17 | 10.98 | 6.70  |
| CONCEPCION | 1957 | 5.17 | 4.81 | 3.77 | 5.49 | 7.53  | 6.54  | 6.09  | 6.70  | 7.01  | 8.50  | 6.99  | 5.57  |
| CONCEPCION | 1958 | 3.93 | 3.17 | 3.52 | 3.21 | 5.78  | 4.08  | 3.80  | 6.10  | 3.96  | 4.66  | 3.79  | 3.79  |
| CONCEPCION | 1959 | 2.57 | 2.25 | 2.47 | 3.13 | 4.80  | 6.01  | 7.00  | 6.12  | 8.21  | 8.25  | 8.44  | 5.46  |
| CONCEPCION | 1960 | 4.53 | 3.94 | 3.39 | 5.22 | 5.94  | 7.37  | 7.64  | 7.68  | 8.79  | 7.71  | 6.97  | 7.54  |
| CONCEPCION | 1961 | 4.40 | 3.92 | 3.67 | 5.70 | 5.15  | 7.85  | 8.01  | 6.49  | 8.68  | 7.45  | 9.47  | 5.93  |
| CONCEPCION | 1962 | 4.66 | 3.97 | 4.23 | 4.44 | 8.58  | 7.88  | 7.96  | 9.04  | 8.68  | 8.32  | 8.94  | 5.55  |
| CONCEPCION | 1963 | 4.63 | 4.87 | 5.07 | 7.25 | 8.33  | 7.76  | 11.10 | 8.19  | 8.09  | 9.03  | 8.61  | 5.85  |
| CONCEPCION | 1964 | 4.36 | 4.16 | 4.17 | 5.88 | 6.20  | 7.90  | 9.13  | 8.77  | 8.95  | 8.08  | 7.75  | 5.79  |
| CONCEPCION | 1965 | 4.82 | 4.04 | 3.87 | 5.25 | 6.98  | 5.99  | 5.90  | 7.43  | 9.37  | 7.89  | 7.82  | 5.35  |
| CONCEPCION | 1966 | 4.95 | 3.71 | 3.95 | 4.74 | 5.82  | 8.73  | 7.14  | 8.85  | 9.19  | 8.67  | 8.53  | 7.23  |
| CONCEPCION | 1967 | 5.23 | 4.35 | 3.87 | 6.85 | 9.58  | 13.67 | 13.72 | 9.34  | 8.07  | 7.62  | 6.50  | 4.78  |
| CONCEPCION | 1968 | 4.28 | 3.72 | 3.88 | 4.85 | 6.39  | 9.23  | 8.34  | 9.65  | 9.77  | 9.10  | 7.96  | 5.85  |
| CONCEPCION | 1969 | 4.43 | 3.70 | 3.22 | 7.01 | 7.48  | 5.24  | 4.50  | 10.38 | 9.44  | 10.93 | 12.43 | 6.26  |
| CONCEPCION | 1970 | 5.45 | 4.33 | 4.15 | 6.09 | 9.48  | 8.10  | 7.72  | 7.66  | 11.70 | 13.62 | 11.88 | 8.80  |
| CONCEPCION | 1971 | 8.47 | 8.18 | 8.73 | 7.73 | 12.15 | 10.70 | 13.57 | 16.43 | 11.67 | 11.41 | 9.09  | 5.82  |
| CONCEPCION | 1972 | 5.97 | 4.95 | 4.63 | 7.04 | 11.40 | 9.96  | 8.04  | 8.93  | 8.17  | 9.92  | 6.70  | 5.86  |
| CONCEPCION | 1973 | 4.29 | 3.75 | 3.59 | 4.45 | 6.28  | 6.21  | 6.66  | 7.07  | 8.95  | 8.23  | 9.34  | 7.40  |
| CONCEPCION | 1974 | 5.92 | 5.20 | 4.94 | 6.05 | 7.88  | 6.68  | 7.94  | 9.04  | 10.63 | 10.45 | 10.04 | 6.55  |
| CONCEPCION | 1975 | 5.26 | 4.92 | 5.56 | 5.59 | 7.66  | 10.35 | 11.09 | 13.41 | 13.59 | 13.58 | 12.98 | 10.71 |
| CONCEPCION | 1976 | 6.47 | 5.71 | 5.84 | 8.16 | 10.02 | 9.29  | 6.62  | 9.37  | 6.70  | 10.39 | 8.07  | 4.76  |
| CONCEPCION | 1977 | 3.71 | 3.51 | 3.11 | 3.86 | 5.35  | 8.77  | 8.16  | 9.34  | 7.81  | 7.26  | 6.34  | 5.27  |
| CONCEPCION | 1978 | 3.78 | 3.43 | 3.67 | 8.19 | 6.09  | 9.17  | 8.57  | 6.87  | 7.54  | 8.23  | 8.03  | 6.86  |
| CONCEPCION | 1979 | 4.32 | 4.11 | 3.71 | 5.27 | 6.95  | 10.27 | 5.15  | 6.14  | 7.05  | 10.87 | 11.41 | 7.04  |
| CONCEPCION | 1980 | 5.03 | 4.75 | 4.27 | 4.83 | 6.29  | 9.08  | 8.39  | 7.43  | 6.22  | 9.29  | 9.04  | 5.72  |
| CONCEPCION | 1981 | 4.20 | 4.27 | 4.24 | 5.81 | 12.76 | 10.98 | 10.69 | 7.53  | 9.24  | 9.69  | 8.34  | 5.56  |

|            |      |      |      |      |       |       |       |       |       |       |       |       |       |
|------------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CONCEPCION | 1982 | 4.57 | 5.59 | 5.72 | 10.13 | 12.32 | 8.48  | 9.33  | 7.88  | 7.32  | 9.97  | 8.12  | 7.01  |
| CONCEPCION | 1983 | 3.87 | 4.14 | 3.91 | 8.02  | 11.93 | 7.65  | 13.60 | 9.02  | 12.69 | 10.24 | 8.51  | 8.30  |
| CONCEPCION | 1984 | 5.27 | 5.14 | 3.37 | 4.70  | 8.95  | 13.30 | 9.46  | 12.00 | 17.82 | 14.26 | 14.53 | 8.90  |
| CONCEPCION | 1985 | 5.47 | 4.68 | 5.96 | 6.31  | 10.70 | 8.01  | 9.71  | 12.94 | 13.88 | 10.91 | 8.39  | 8.26  |
| CONCEPCION | 1986 | 5.96 | 5.34 | 5.00 | 9.22  | 7.08  | 9.72  | 7.40  | 6.75  | 6.21  | 12.06 | 6.91  | 5.95  |
| CONCEPCION | 1987 | 2.15 | 2.12 | 1.33 | 5.36  | 10.03 | 8.21  | 13.41 | 7.23  | 12.60 | 13.44 | 7.71  | 6.12  |
| CONCEPCION | 1988 | 4.36 | 5.50 | 4.15 | 3.84  | 5.12  | 7.96  | 9.64  | 16.95 | 10.03 | 4.84  | 7.95  | 3.49  |
| CONCEPCION | 1989 | 2.21 | 1.75 | 5.83 | 5.19  | 8.56  | 10.84 | 10.47 | 12.66 | 10.85 | 11.72 | 7.17  | 6.46  |
| CONCEPCION | 1990 | 4.24 | 4.53 | 3.81 | 5.08  | 9.08  | 8.50  | 8.50  | 5.97  | 5.51  | 11.29 | 10.28 | 6.51  |
| CONCEPCION | 1991 | 5.51 | 5.24 | 5.77 | 5.78  | 17.37 | 14.16 | 16.05 | 6.49  | 5.11  | 6.40  | 7.47  | 5.29  |
| CONCEPCION | 1992 | 2.19 | 2.28 | 4.11 | 2.94  | 4.78  | 3.48  | 4.34  | 6.40  | 8.94  | 6.02  | 4.89  | 5.03  |
| CONCEPCION | 1993 | 4.71 | 3.71 | 5.04 | 5.36  | 7.91  | 5.92  | 7.34  | 8.28  | 11.00 | 7.64  | 7.93  | 7.58  |
| CONCEPCION | 1994 | 8.65 | 7.15 | 5.07 | 9.19  | 10.01 | 13.15 | 10.17 | 17.50 | 12.33 | 12.85 | 12.30 | 8.35  |
| CONCEPCION | 1995 | 5.91 | 4.23 | 3.94 | 5.60  | 7.95  | 11.18 | 14.53 | 12.11 | 12.58 | 11.78 | 9.94  | 11.78 |
| CONCEPCION | 1996 | 6.00 | 7.09 | 8.57 | 9.06  | 15.35 | 11.81 | 15.78 | 14.06 | 12.22 | 13.94 | 13.02 | 8.48  |
| CONCEPCION | 1997 | 6.47 | 6.78 | 6.63 | 8.32  | 6.80  | 8.15  | 5.23  | 4.94  | 8.50  | 4.58  | 5.58  | 3.33  |
| CONCEPCION | 1998 | 2.82 | 3.36 | 4.02 | 5.83  | 6.84  | 8.35  | 13.91 | 10.77 | 12.46 | 9.37  | 9.09  | 8.76  |
| CONCEPCION | 1999 | 5.41 | 7.41 | 7.76 | 11.13 | 14.12 | 14.44 | 12.49 | 9.84  | 11.93 | 13.84 | 11.80 | 8.43  |
| CONCEPCION | 2000 | 5.68 | 6.23 | 4.63 | 4.78  | 9.00  | 10.23 | 15.54 | 12.96 | 16.93 | 13.61 | 9.95  | 8.76  |
| CONCEPCION | 2001 | 6.80 | 6.38 | 6.50 | 6.49  | 10.94 | 12.72 | 12.81 | 7.94  | 10.53 | 9.06  | 10.85 | 9.81  |
| CONCEPCION | 2002 | 5.88 | 4.91 | 4.18 | 4.56  | 5.56  | 7.45  | 4.94  | 3.94  | 4.07  | 4.70  | 4.18  | 4.21  |
| CONCEPCION | 2003 | 2.94 | 3.22 | 3.42 | 4.69  | 6.24  | 7.51  | 6.07  | 5.84  | 5.95  | 9.54  | 7.79  | 6.53  |
| CONCEPCION | 2004 | 4.66 | 4.15 | 5.57 | 6.89  | 9.58  | 8.16  | 10.79 | 8.70  | 10.15 | 9.40  | 12.51 | 7.85  |
| CONCEPCION | 2005 | 7.46 | 7.02 | 7.24 | 8.19  | 9.06  | 10.22 | 8.41  | 8.27  | 8.30  | 9.95  | 12.30 | 7.36  |
| CONCEPCION | 2006 | 5.71 | 6.03 | 6.46 | 5.96  | 14.04 | 11.57 | 8.76  | 9.41  | 12.22 | 11.36 | 13.44 | 9.64  |
| CONCEPCION | 2007 | 7.97 | 6.78 | 5.74 | 8.51  | 14.31 | 12.63 | 13.18 | 15.51 | 13.68 | 17.06 | 14.18 | 9.01  |
| CONCEPCION | 2008 | 7.66 | 7.41 | 7.42 | 7.52  | 8.17  | 11.11 | 15.01 | 10.21 | 12.62 | 16.54 | 14.06 | 6.64  |

|         |      |      |      |      |      |      |      |      |      |       |      |      |      |
|---------|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| DOLORES | 1955 | 3.97 | 2.74 | 3.04 | 3.72 | 4.92 | 5.60 | 6.31 | 5.34 | 6.19  | 7.45 | 6.15 | 4.66 |
| DOLORES | 1956 | 4.71 | 3.98 | 3.60 | 4.05 | 5.63 | 7.04 | 5.04 | 6.17 | 5.58  | 6.26 | 6.48 | 3.95 |
| DOLORES | 1957 | 3.36 | 2.79 | 2.22 | 3.07 | 4.22 | 3.79 | 3.59 | 3.75 | 4.14  | 4.76 | 4.12 | 3.29 |
| DOLORES | 1958 | 2.55 | 1.84 | 2.08 | 1.80 | 3.24 | 2.37 | 2.24 | 3.42 | 2.34  | 2.61 | 2.24 | 2.24 |
| DOLORES | 1959 | 1.67 | 1.31 | 1.46 | 1.75 | 2.69 | 3.49 | 4.13 | 3.43 | 4.84  | 4.62 | 4.98 | 3.22 |
| DOLORES | 1960 | 2.94 | 2.29 | 2.00 | 2.92 | 3.33 | 4.27 | 4.51 | 4.30 | 5.19  | 4.32 | 4.11 | 4.45 |
| DOLORES | 1961 | 2.86 | 2.27 | 2.17 | 3.19 | 2.88 | 4.55 | 4.73 | 3.63 | 5.12  | 4.17 | 5.59 | 3.50 |
| DOLORES | 1962 | 3.03 | 2.30 | 2.50 | 2.49 | 4.80 | 4.57 | 4.70 | 5.06 | 5.12  | 4.66 | 5.27 | 3.27 |
| DOLORES | 1963 | 3.01 | 2.82 | 2.99 | 4.06 | 4.66 | 4.50 | 6.55 | 4.59 | 4.77  | 5.06 | 5.08 | 3.45 |
| DOLORES | 1964 | 2.83 | 2.41 | 2.46 | 3.29 | 3.47 | 4.58 | 5.39 | 4.91 | 5.28  | 4.52 | 4.57 | 3.42 |
| DOLORES | 1965 | 3.13 | 2.34 | 2.28 | 2.94 | 3.91 | 3.47 | 3.48 | 4.16 | 5.53  | 4.42 | 4.61 | 3.16 |
| DOLORES | 1966 | 3.22 | 2.15 | 2.33 | 2.65 | 3.26 | 5.06 | 4.21 | 4.96 | 5.42  | 4.86 | 5.03 | 4.27 |
| DOLORES | 1967 | 3.40 | 2.52 | 2.28 | 3.84 | 5.36 | 7.93 | 8.09 | 5.23 | 4.76  | 4.27 | 3.84 | 2.82 |
| DOLORES | 1968 | 2.78 | 2.16 | 2.29 | 2.72 | 3.58 | 5.35 | 4.92 | 5.40 | 5.76  | 5.10 | 4.70 | 3.45 |
| DOLORES | 1969 | 2.88 | 2.15 | 1.90 | 3.93 | 4.19 | 3.04 | 2.66 | 5.81 | 5.57  | 6.12 | 7.33 | 3.69 |
| DOLORES | 1970 | 3.54 | 2.51 | 2.45 | 3.41 | 5.31 | 4.70 | 4.55 | 4.29 | 6.90  | 7.63 | 7.01 | 5.19 |
| DOLORES | 1971 | 5.51 | 4.74 | 5.15 | 4.33 | 6.80 | 6.21 | 8.01 | 9.20 | 6.89  | 6.39 | 5.36 | 3.43 |
| DOLORES | 1972 | 3.88 | 2.87 | 2.73 | 3.94 | 6.38 | 5.78 | 4.74 | 5.00 | 4.82  | 5.56 | 3.95 | 3.46 |
| DOLORES | 1973 | 2.79 | 2.18 | 2.12 | 2.49 | 3.52 | 3.60 | 3.93 | 3.96 | 5.28  | 4.61 | 5.51 | 4.37 |
| DOLORES | 1974 | 3.85 | 3.02 | 2.91 | 3.39 | 4.41 | 3.87 | 4.68 | 5.06 | 6.27  | 5.85 | 5.92 | 3.86 |
| DOLORES | 1975 | 3.42 | 2.85 | 3.28 | 3.13 | 4.29 | 6.00 | 6.54 | 7.51 | 8.02  | 7.60 | 7.66 | 6.32 |
| DOLORES | 1976 | 4.21 | 3.31 | 3.45 | 4.57 | 5.61 | 5.39 | 3.91 | 5.25 | 3.95  | 5.82 | 4.76 | 2.81 |
| DOLORES | 1977 | 2.41 | 2.04 | 1.83 | 2.16 | 3.00 | 5.09 | 4.81 | 5.23 | 4.61  | 4.07 | 3.74 | 3.11 |
| DOLORES | 1978 | 2.46 | 1.99 | 2.17 | 4.59 | 3.41 | 5.32 | 5.06 | 3.85 | 4.45  | 4.61 | 4.74 | 4.05 |
| DOLORES | 1979 | 2.81 | 2.38 | 2.19 | 2.95 | 3.89 | 5.96 | 3.04 | 3.44 | 4.16  | 6.09 | 6.73 | 4.15 |
| DOLORES | 1980 | 3.27 | 2.76 | 2.52 | 2.70 | 3.52 | 5.27 | 4.95 | 4.16 | 3.67  | 5.20 | 5.33 | 3.37 |
| DOLORES | 1981 | 2.73 | 2.48 | 2.50 | 3.25 | 7.15 | 6.37 | 6.31 | 4.22 | 5.45  | 5.43 | 4.92 | 3.28 |
| DOLORES | 1982 | 2.97 | 3.24 | 3.37 | 5.67 | 6.90 | 4.92 | 5.50 | 4.41 | 4.32  | 5.58 | 4.79 | 4.14 |
| DOLORES | 1983 | 2.52 | 2.40 | 2.31 | 4.49 | 6.68 | 4.44 | 8.02 | 5.05 | 7.49  | 5.73 | 5.02 | 4.90 |
| DOLORES | 1984 | 3.43 | 2.98 | 1.99 | 2.63 | 5.01 | 7.71 | 5.58 | 6.72 | 10.51 | 7.99 | 8.57 | 5.25 |
| DOLORES | 1985 | 3.56 | 2.71 | 3.52 | 3.53 | 5.99 | 4.65 | 5.73 | 7.25 | 8.19  | 6.11 | 4.95 | 4.87 |
| DOLORES | 1986 | 3.87 | 3.10 | 2.95 | 5.16 | 3.96 | 5.64 | 4.37 | 3.78 | 3.66  | 6.75 | 4.08 | 3.51 |
| DOLORES | 1987 | 1.40 | 1.23 | 0.78 | 3.00 | 5.62 | 4.76 | 7.91 | 4.05 | 7.43  | 7.53 | 4.55 | 3.61 |
| DOLORES | 1988 | 2.83 | 3.19 | 2.45 | 2.15 | 2.87 | 4.62 | 5.69 | 9.49 | 5.92  | 2.71 | 4.69 | 2.06 |
| DOLORES | 1989 | 1.44 | 1.02 | 3.44 | 2.91 | 4.79 | 6.29 | 6.18 | 7.09 | 6.40  | 6.56 | 4.23 | 3.81 |
| DOLORES | 1990 | 2.76 | 2.63 | 2.25 | 2.84 | 5.08 | 4.93 | 5.02 | 3.34 | 3.25  | 6.32 | 6.07 | 3.84 |
| DOLORES | 1991 | 3.58 | 3.04 | 3.40 | 3.24 | 9.73 | 8.21 | 9.47 | 3.63 | 3.01  | 3.58 | 4.41 | 3.12 |
| DOLORES | 1992 | 1.42 | 1.32 | 2.42 | 1.65 | 2.68 | 2.02 | 2.56 | 3.58 | 5.27  | 3.37 | 2.89 | 2.97 |
| DOLORES | 1993 | 3.06 | 2.15 | 2.97 | 3.00 | 4.43 | 3.43 | 4.33 | 4.64 | 6.49  | 4.28 | 4.68 | 4.47 |
| DOLORES | 1994 | 5.62 | 4.15 | 2.99 | 5.15 | 5.61 | 7.63 | 6.00 | 9.80 | 7.27  | 7.20 | 7.26 | 4.93 |
| DOLORES | 1995 | 3.84 | 2.45 | 2.32 | 3.14 | 4.45 | 6.48 | 8.57 | 6.78 | 7.42  | 6.60 | 5.86 | 6.95 |
| DOLORES | 1996 | 3.90 | 4.11 | 5.06 | 5.07 | 8.60 | 6.85 | 9.31 | 7.87 | 7.21  | 7.81 | 7.68 | 5.00 |
| DOLORES | 1997 | 4.21 | 3.93 | 3.91 | 4.66 | 3.81 | 4.73 | 3.09 | 2.77 | 5.02  | 2.56 | 3.29 | 1.96 |
| DOLORES | 1998 | 1.83 | 1.95 | 2.37 | 3.26 | 3.83 | 4.84 | 8.21 | 6.03 | 7.35  | 5.25 | 5.36 | 5.17 |
| DOLORES | 1999 | 3.52 | 4.30 | 4.58 | 6.23 | 7.91 | 8.38 | 7.37 | 5.51 | 7.04  | 7.75 | 6.96 | 4.97 |

|         |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| DOLORES | 2000 | 3.69  | 3.61  | 2.73  | 2.68  | 5.04  | 5.93  | 9.17  | 7.26  | 9.99  | 7.62  | 5.87  | 5.17  |
| DOLORES | 2001 | 4.42  | 3.70  | 3.84  | 3.63  | 6.13  | 7.38  | 7.56  | 4.45  | 6.21  | 5.07  | 6.40  | 5.79  |
| DOLORES | 2002 | 3.82  | 2.85  | 2.47  | 2.55  | 3.11  | 4.32  | 2.91  | 2.21  | 2.40  | 2.63  | 2.47  | 2.48  |
| DOLORES | 2003 | 1.91  | 1.87  | 2.02  | 2.63  | 3.49  | 4.36  | 3.58  | 3.27  | 3.51  | 5.34  | 4.60  | 3.85  |
| DOLORES | 2004 | 3.03  | 2.41  | 3.29  | 3.86  | 5.36  | 4.73  | 6.37  | 4.87  | 5.99  | 5.26  | 7.38  | 4.63  |
| DOLORES | 2005 | 4.85  | 4.07  | 4.27  | 4.59  | 5.07  | 5.93  | 4.96  | 4.63  | 4.90  | 5.57  | 7.26  | 4.34  |
| DOLORES | 2006 | 3.71  | 3.50  | 3.81  | 3.34  | 7.86  | 6.71  | 5.17  | 5.27  | 7.21  | 6.36  | 7.93  | 5.69  |
| DOLORES | 2007 | 5.18  | 3.93  | 3.39  | 4.77  | 8.01  | 7.33  | 7.78  | 8.69  | 8.07  | 9.55  | 8.37  | 5.32  |
| DOLORES | 2008 | 4.98  | 4.30  | 4.38  | 4.21  | 4.58  | 6.44  | 8.86  | 5.72  | 7.45  | 9.26  | 8.30  | 3.92  |
| GRANDE  | 1942 | 16.73 | 17.68 | 25.95 | 46.66 | 55.79 | 38.49 | 30.89 | 36.69 | 32.12 | 54.55 | 53.51 | 37.73 |
| GRANDE  | 1943 | 35.36 | 30.41 | 31.36 | 65.39 | 50.09 | 41.53 | 29.18 | 31.17 | 29.56 | 56.36 | 43.72 | 28.80 |
| GRANDE  | 1944 | 21.86 | 21.57 | 22.43 | 22.52 | 59.12 | 64.72 | 32.31 | 29.94 | 40.87 | 53.22 | 40.77 | 25.28 |
| GRANDE  | 1945 | 20.05 | 14.83 | 19.01 | 35.36 | 56.26 | 28.89 | 30.98 | 43.62 | 29.27 | 41.15 | 40.68 | 42.10 |
| GRANDE  | 1946 | 37.45 | 22.14 | 29.37 | 45.05 | 40.87 | 25.95 | 21.19 | 25.76 | 25.19 | 32.69 | 32.79 | 33.36 |
| GRANDE  | 1947 | 24.14 | 17.96 | 15.21 | 20.15 | 31.74 | 34.88 | 36.97 | 29.56 | 36.31 | 47.81 | 32.12 | 23.95 |
| GRANDE  | 1948 | 17.68 | 15.11 | 16.44 | 35.64 | 40.11 | 35.93 | 44.76 | 25.47 | 23.38 | 24.90 | 43.24 | 24.62 |
| GRANDE  | 1949 | 13.88 | 15.11 | 20.43 | 25.09 | 32.88 | 27.28 | 40.49 | 31.46 | 29.65 | 45.81 | 41.91 | 32.69 |
| GRANDE  | 1950 | 19.10 | 22.71 | 24.33 | 22.43 | 38.78 | 59.88 | 40.30 | 61.87 | 35.93 | 49.04 | 42.20 | 43.05 |
| GRANDE  | 1951 | 29.66 | 35.69 | 28.18 | 34.90 | 36.28 | 28.77 | 34.70 | 29.56 | 30.35 | 28.47 | 33.22 | 24.32 |
| GRANDE  | 1952 | 19.48 | 17.10 | 19.58 | 26.60 | 30.45 | 27.98 | 31.44 | 48.94 | 46.96 | 40.14 | 49.73 | 25.21 |
| GRANDE  | 1953 | 16.51 | 15.92 | 14.24 | 21.06 | 36.09 | 26.50 | 19.77 | 15.92 | 22.74 | 37.08 | 47.06 | 34.31 |
| GRANDE  | 1954 | 16.12 | 17.99 | 14.43 | 27.88 | 33.91 | 41.62 | 53.49 | 39.05 | 30.49 | 53.50 | 47.27 | 38.92 |
| GRANDE  | 1955 | 26.08 | 23.81 | 29.35 | 39.46 | 44.86 | 47.57 | 40.20 | 39.80 | 47.20 | 61.70 | 58.90 | 52.60 |
| GRANDE  | 1956 | 42.90 | 54.30 | 38.20 | 45.80 | 56.20 | 56.60 | 44.10 | 49.90 | 46.50 | 67.10 | 44.50 | 41.00 |
| GRANDE  | 1957 | 25.50 | 25.40 | 20.10 | 37.80 | 45.20 | 31.80 | 28.70 | 32.50 | 34.70 | 46.50 | 40.20 | 24.80 |
| GRANDE  | 1958 | 18.80 | 14.70 | 19.00 | 20.00 | 34.90 | 22.60 | 15.00 | 26.90 | 16.10 | 27.80 | 26.10 | 26.40 |
| GRANDE  | 1959 | 13.90 | 11.30 | 15.30 | 22.50 | 27.30 | 28.50 | 28.50 | 27.10 | 35.70 | 40.00 | 41.90 | 22.50 |
| GRANDE  | 1960 | 21.10 | 19.50 | 19.60 | 34.60 | 35.20 | 29.20 | 34.50 | 32.10 | 39.40 | 39.80 | 39.00 | 35.30 |
| GRANDE  | 1961 | 18.80 | 19.90 | 21.30 | 32.80 | 24.50 | 32.90 | 29.90 | 23.80 | 33.40 | 33.50 | 50.60 | 27.20 |
| GRANDE  | 1962 | 21.20 | 18.20 | 23.90 | 29.10 | 54.80 | 40.60 | 33.10 | 39.70 | 39.10 | 46.90 | 43.80 | 30.30 |
| GRANDE  | 1963 | 21.60 | 26.10 | 27.50 | 49.40 | 51.40 | 34.30 | 40.40 | 35.70 | 31.80 | 43.00 | 51.30 | 28.10 |
| GRANDE  | 1964 | 20.20 | 21.40 | 19.00 | 37.70 | 30.70 | 42.80 | 40.20 | 38.00 | 44.10 | 41.20 | 44.80 | 30.10 |
| GRANDE  | 1965 | 23.30 | 17.90 | 15.50 | 27.60 | 33.60 | 25.60 | 20.10 | 27.70 | 34.90 | 43.20 | 50.20 | 32.60 |
| GRANDE  | 1966 | 27.10 | 16.40 | 17.90 | 22.50 | 27.90 | 36.50 | 27.40 | 32.40 | 33.40 | 47.40 | 47.40 | 40.00 |
| GRANDE  | 1967 | 23.80 | 28.10 | 26.20 | 34.20 | 43.60 | 53.80 | 42.30 | 30.90 | 33.20 | 33.40 | 39.70 | 23.50 |
| GRANDE  | 1968 | 18.80 | 19.40 | 18.30 | 32.90 | 39.40 | 45.00 | 40.40 | 32.80 | 45.60 | 51.40 | 47.90 | 31.30 |
| GRANDE  | 1969 | 22.80 | 17.40 | 14.10 | 31.90 | 32.20 | 28.60 | 13.50 | 36.00 | 38.00 | 41.40 | 43.90 | 30.10 |
| GRANDE  | 1970 | 24.20 | 21.10 | 17.30 | 32.10 | 49.60 | 37.80 | 29.80 | 32.80 | 47.30 | 67.10 | 68.40 | 46.70 |
| GRANDE  | 1971 | 46.20 | 45.20 | 55.30 | 51.40 | 75.30 | 56.90 | 58.90 | 65.00 | 59.20 | 64.80 | 59.40 | 36.10 |
| GRANDE  | 1972 | 33.00 | 28.10 | 30.10 | 39.60 | 60.60 | 45.00 | 34.20 | 35.10 | 30.70 | 40.10 | 40.70 | 27.20 |
| GRANDE  | 1973 | 18.70 | 13.50 | 15.50 | 23.00 | 33.70 | 34.90 | 29.50 | 32.30 | 50.80 | 50.70 | 48.60 | 49.90 |
| GRANDE  | 1974 | 38.80 | 36.80 | 33.30 | 39.10 | 41.90 | 33.00 | 36.20 | 43.20 | 61.00 | 66.20 | 59.30 | 31.80 |
| GRANDE  | 1975 | 21.60 | 27.10 | 34.10 | 24.70 | 36.90 | 39.90 | 54.60 | 51.20 | 61.30 | 53.70 | 67.20 | 57.10 |
| GRANDE  | 1976 | 29.40 | 26.10 | 33.00 | 42.50 | 51.60 | 42.90 | 26.60 | 24.30 | 24.60 | 51.70 | 36.90 | 21.70 |
| GRANDE  | 1977 | 14.90 | 12.20 | 12.40 | 20.40 | 29.10 | 34.30 | 31.60 | 36.30 | 28.90 | 38.20 | 43.90 | 22.30 |

|               |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GRANDE        | 1978 | 14.90 | 13.40 | 22.20 | 48.00 | 33.90 | 42.30 | 31.40 | 23.20 | 30.60 | 40.10 | 44.10 | 33.30 |
| GRANDE        | 1979 | 17.10 | 16.60 | 22.50 | 30.90 | 30.10 | 34.10 | 19.50 | 20.90 | 33.40 | 46.20 | 57.40 | 29.50 |
| GRANDE        | 1980 | 21.10 | 20.30 | 14.80 | 23.80 | 27.50 | 35.10 | 26.20 | 24.80 | 27.80 | 42.60 | 38.80 | 31.20 |
| GRANDE        | 1981 | 19.80 | 16.30 | 24.10 | 33.90 | 60.10 | 50.90 | 46.50 | 32.80 | 44.60 | 53.50 | 47.40 | 36.10 |
| GRANDE        | 1982 | 35.90 | 39.80 | 35.50 | 56.80 | 64.20 | 41.80 | 31.90 | 27.10 | 29.40 | 45.10 | 37.30 | 33.50 |
| GRANDE        | 1983 | 18.70 | 16.80 | 23.90 | 33.90 | 41.10 | 24.70 | 36.20 | 30.00 | 37.30 | 37.10 | 39.00 | 41.40 |
| GRANDE        | 1984 | 31.40 | 30.80 | 19.80 | 24.90 | 44.40 | 44.50 | 41.30 | 38.80 | 50.00 | 65.10 | 57.50 | 36.60 |
| GRANDE        | 1985 | 24.60 | 20.80 | 25.60 | 30.60 | 41.00 | 29.80 | 25.30 | 41.90 | 54.80 | 47.40 | 40.50 | 30.80 |
| GRANDE        | 1986 | 24.40 | 29.50 | 24.90 | 42.70 | 32.60 | 40.20 | 26.40 | 23.40 | 23.90 | 52.40 | 37.20 | 23.90 |
| GRANDE        | 1987 | 17.90 | 15.80 | 14.90 | 18.30 | 34.00 | 16.90 | 20.60 | 24.55 | 33.90 | 46.60 | 30.40 | 25.40 |
| GRANDE        | 1988 | 15.60 | 15.80 | 11.50 | 23.60 | 25.90 | 29.00 | 28.40 | 48.94 | 51.12 | 54.45 | 62.05 | 49.07 |
| GRANDE        | 1989 | 37.49 | 31.17 | 30.70 | 28.80 | 41.40 | 35.10 | 26.40 | 32.40 | 43.30 | 45.30 | 42.50 | 27.50 |
| GRANDE        | 1990 | 23.10 | 25.50 | 24.20 | 33.50 | 36.40 | 28.90 | 25.10 | 19.80 | 27.60 | 55.00 | 35.00 | 24.80 |
| GRANDE        | 1991 | 21.26 | 14.53 | 24.60 | 24.80 | 35.20 | 28.20 | 26.80 | 26.00 | 21.11 | 37.10 | 38.80 | 30.50 |
| GRANDE        | 1992 | 17.00 | 16.60 | 19.30 | 17.30 | 25.86 | 19.82 | 18.98 | 22.74 | 28.18 | 22.60 | 26.60 | 31.12 |
| GRANDE        | 1993 | 21.76 | 13.21 | 16.56 | 25.50 | 40.00 | 17.20 | 22.80 | 23.70 | 40.50 | 42.06 | 51.00 | 42.70 |
| GRANDE        | 1994 | 22.33 | 25.02 | 33.93 | 41.49 | 35.93 | 35.35 | 26.99 | 32.63 | 29.57 | 40.05 | 44.66 | 23.81 |
| GRANDE        | 1995 | 16.76 | 13.83 | 16.45 | 21.15 | 30.35 | 33.23 | 36.97 | 51.66 | 40.29 | 48.78 | 40.00 | 42.97 |
| GRANDE        | 1996 | 29.80 | 29.11 | 47.65 | 37.43 | 59.07 | 59.11 | 68.09 | 41.10 | 36.65 | 46.04 | 40.07 | 27.13 |
| GRANDE        | 1997 | 26.34 | 25.10 | 21.97 | 32.21 | 23.48 | 30.57 | 16.67 | 12.96 | 15.68 | 14.99 | 24.86 | 14.50 |
| GRANDE        | 1998 | 10.87 | 10.70 | 12.93 | 27.64 | 33.93 | 31.56 | 38.10 | 31.22 | 48.61 | 40.03 | 40.03 | 42.43 |
| GRANDE        | 1999 | 35.60 | 39.30 | 49.30 | 48.30 | 47.00 | 48.20 | 36.40 | 37.50 | 56.60 | 52.10 | 44.80 | 47.50 |
| GRANDE        | 2000 | 28.50 | 31.00 | 29.10 | 33.80 | 45.60 | 47.10 | 42.60 | 41.90 | 56.10 | 40.90 | 38.70 | 27.90 |
| GRANDE        | 2001 | 21.99 | 18.03 | 27.16 | 21.95 | 32.56 | 36.73 | 31.92 | 19.53 | 29.38 | 32.35 | 41.99 | 32.67 |
| GRANDE        | 2002 | 20.22 | 16.35 | 19.49 | 30.45 | 32.28 | 39.79 | 20.29 | 16.80 | 15.66 | 22.15 | 23.47 | 27.40 |
| GRANDE        | 2003 | 13.38 | 15.22 | 17.15 | 28.46 | 32.47 | 39.34 | 21.83 | 22.72 | 25.97 | 34.96 | 35.66 | 31.38 |
| GRANDE        | 2004 | 22.74 | 17.47 | 17.05 | 20.90 | 31.66 | 25.12 | 36.88 | 23.07 | 35.86 | 34.36 | 44.06 | 28.48 |
| GRANDE        | 2005 | 20.84 | 16.36 | 14.32 | 22.81 | 36.58 | 30.48 | 22.33 | 18.65 | 22.32 | 41.41 | 44.90 | 27.81 |
| GRANDE        | 2006 | 23.00 | 17.99 | 26.82 | 39.91 | 59.22 | 45.25 | 24.73 | 25.26 | 33.86 | 34.16 | 54.21 | 35.86 |
| GRANDE        | 2007 | 22.71 | 16.34 | 21.91 | 43.13 | 53.76 | 51.37 | 31.41 | 40.70 | 40.06 | 57.49 | 55.34 | 37.83 |
| GRANDE        | 2008 | 26.12 | 26.92 | 31.65 | 31.88 | 44.78 | 56.07 | 59.21 | 53.85 | 48.94 | 57.07 | 63.24 | 34.09 |
| GUADALUP<br>E | 1937 |       |       |       |       |       |       |       |       |       | 20.88 | 22.88 | 22.69 |
| GUADALUP<br>E | 1938 | 12.68 | 10.68 | 13.25 | 27.74 | 30.60 | 37.08 | 33.56 | 41.56 | 31.27 | 29.36 | 28.03 | 22.12 |
| GUADALUP<br>E | 1939 | 14.49 | 10.49 | 11.73 | 21.26 | 21.26 | 25.17 | 24.60 | 27.93 | 29.93 | 28.50 | 24.02 | 25.17 |
| GUADALUP<br>E | 1940 | 12.87 | 13.16 | 12.11 | 12.39 | 16.02 | 21.83 | 12.30 | 17.54 | 23.83 | 18.59 | 18.02 | 16.40 |
| GUADALUP<br>E | 1941 | 9.91  | 10.20 | 9.06  | 16.59 | 17.06 | 15.63 | 28.41 | 40.42 | 31.74 | 27.45 | 20.50 | 22.40 |
| GUADALUP<br>E | 1942 | 12.39 | 14.20 | 15.44 | 25.45 | 32.32 | 23.83 | 27.36 | 31.36 | 26.79 | 28.88 | 26.03 | 19.35 |
| GUADALUP<br>E | 1943 | 14.78 | 12.87 | 13.73 | 26.41 | 35.56 | 28.12 | 19.45 | 20.78 | 24.02 | 31.17 | 20.59 | 14.11 |
| GUADALUP<br>E | 1944 | 11.25 | 10.87 | 11.34 | 11.34 | 29.27 | 28.50 | 17.83 | 19.16 | 27.93 | 30.31 | 27.65 | 17.64 |

|               |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GUADALUP<br>E | 1945 | 13.54 | 11.82 | 16.02 | 19.45 | 30.03 | 22.59 | 32.13 | 46.62 | 25.45 | 35.94 | 26.79 | 23.36 |
| GUADALUP<br>E | 1946 | 17.64 | 13.82 | 18.11 | 31.94 | 28.79 | 24.50 | 22.69 | 27.55 | 31.84 | 25.55 | 22.50 | 18.49 |
| GUADALUP<br>E | 1947 | 19.54 | 15.06 | 13.16 | 20.21 | 25.17 | 30.22 | 27.45 | 22.69 | 31.84 | 29.46 | 21.74 | 17.54 |
| GUADALUP<br>E | 1948 | 16.78 | 11.63 | 12.11 | 22.40 | 24.60 | 29.27 | 19.45 | 22.50 | 23.64 | 23.45 | 21.74 | 16.49 |
| GUADALUP<br>E | 1949 | 11.92 | 9.63  | 12.30 | 15.92 | 25.36 | 26.98 | 31.65 | 33.27 | 27.17 | 26.41 | 23.17 | 19.83 |
| GUADALUP<br>E | 1950 | 16.02 | 15.73 | 15.06 | 13.44 | 24.98 | 35.08 | 32.03 | 41.85 | 27.65 | 31.08 | 28.98 | 25.93 |
| GUADALUP<br>E | 1951 | 18.49 | 23.55 | 17.16 | 26.50 | 26.88 | 27.65 | 30.98 | 28.41 | 36.03 | 24.40 | 22.02 | 19.35 |
| GUADALUP<br>E | 1952 | 12.68 | 10.96 | 9.34  | 15.06 | 23.07 | 24.50 | 31.17 | 35.27 | 32.51 | 30.60 | 26.31 | 20.50 |
| GUADALUP<br>E | 1953 | 17.45 | 13.73 | 13.54 | 19.07 | 30.89 | 24.88 | 22.50 | 15.16 | 18.68 | 17.25 | 20.69 | 14.87 |
| GUADALUP<br>E | 1954 | 14.91 | 11.79 | 12.24 | 26.47 | 30.14 | 34.15 | 36.82 | 28.14 | 31.81 | 41.05 | 30.14 | 20.36 |
| GUADALUP<br>E | 1955 | 17.58 | 14.79 | 18.91 | 24.25 | 31.37 | 28.81 | 32.70 | 30.81 | 31.26 | 39.93 | 32.26 | 20.13 |
| GUADALUP<br>E | 1956 | 16.80 | 17.13 | 18.02 | 23.92 | 40.16 | 45.38 | 28.37 | 37.71 | 31.59 | 35.82 | 33.82 | 22.25 |
| GUADALUP<br>E | 1957 | 14.91 | 17.69 | 12.68 | 16.46 | 24.25 | 25.25 | 25.14 | 27.59 | 25.92 | 28.03 | 22.36 | 17.46 |
| GUADALUP<br>E | 1958 | 11.68 | 10.01 | 11.12 | 10.46 | 22.02 | 14.35 | 13.01 | 23.58 | 14.35 | 18.24 | 14.02 | 14.13 |
| GUADALUP<br>E | 1959 | 9.90  | 8.01  | 10.23 | 13.68 | 20.13 | 25.92 | 32.70 | 25.70 | 35.15 | 37.15 | 34.48 | 21.69 |
| GUADALUP<br>E | 1960 | 16.02 | 13.24 | 10.57 | 18.58 | 23.25 | 28.48 | 27.92 | 28.03 | 33.48 | 31.15 | 27.25 | 19.55 |
| GUADALUP<br>E | 1961 | 12.27 | 10.43 | 10.55 | 14.82 | 17.65 | 24.95 | 23.83 | 20.30 | 28.22 | 23.54 | 30.82 | 18.09 |
| GUADALUP<br>E | 1962 | 13.59 | 11.77 | 12.67 | 15.71 | 31.91 | 31.16 | 29.53 | 30.42 | 34.29 | 26.14 | 24.92 | 14.81 |
| GUADALUP<br>E | 1963 | 11.61 | 12.40 | 15.34 | 23.47 | 26.07 | 22.24 | 40.99 | 29.01 | 26.34 | 27.03 | 26.77 | 12.87 |
| GUADALUP<br>E | 1964 | 10.80 | 10.37 | 11.31 | 21.42 | 18.22 | 18.85 | 33.03 | 25.05 | 31.57 | 28.19 | 23.23 | 15.94 |
| GUADALUP<br>E | 1965 | 12.20 | 10.30 | 11.38 | 15.05 | 24.74 | 19.77 | 18.26 | 22.40 | 31.01 | 26.76 | 23.75 | 15.62 |
| GUADALUP<br>E | 1966 | 15.22 | 11.00 | 11.99 | 16.08 | 13.83 | 24.18 | 17.98 | 21.19 | 21.52 | 21.51 | 19.48 | 18.24 |
| GUADALUP<br>E | 1967 | 13.03 | 11.88 | 11.05 | 21.88 | 33.42 | 36.89 | 33.34 | 23.17 | 26.50 | 20.63 | 15.02 | 11.85 |
| GUADALUP<br>E | 1968 | 10.01 | 8.62  | 12.53 | 15.07 | 20.56 | 26.30 | 27.56 | 25.98 | 30.99 | 26.63 | 23.99 | 15.22 |
| GUADALUP<br>E | 1969 | 12.12 | 11.46 | 10.59 | 17.53 | 18.95 | 15.32 | 11.71 | 28.52 | 30.80 | 35.68 | 26.79 | 21.34 |
| GUADALUP<br>E | 1970 | 22.33 | 18.12 | 20.03 | 25.58 | 32.61 | 30.49 | 28.01 | 26.46 | 37.73 | 43.72 | 35.18 | 27.07 |
| GUADALUP<br>E | 1971 | 26.66 | 25.60 | 29.33 | 24.46 | 33.40 | 34.59 | 40.09 | 48.58 | 36.96 | 37.23 | 26.26 | 17.40 |

|               |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GUADALUP<br>E | 1972 | 18.11 | 13.75 | 13.93 | 22.55 | 37.58 | 33.52 | 25.57 | 32.08 | 32.08 | 25.02 | 21.35 | 17.45 |
| GUADALUP<br>E | 1973 | 11.48 | 9.77  | 11.49 | 11.58 | 23.46 | 26.53 | 22.99 | 23.60 | 33.47 | 27.07 | 30.39 | 21.94 |
| GUADALUP<br>E | 1974 | 14.49 | 12.98 | 13.36 | 17.09 | 31.09 | 23.53 | 25.50 | 30.99 | 37.76 | 35.58 | 31.34 | 16.72 |
| GUADALUP<br>E | 1975 | 12.71 | 11.18 | 13.97 | 15.51 | 25.32 | 37.58 | 40.15 | 40.27 | 39.86 | 44.64 | 35.42 | 27.15 |
| GUADALUP<br>E | 1976 | 17.60 | 13.87 | 16.07 | 26.23 | 32.25 | 26.72 | 21.22 | 27.06 | 25.15 | 29.01 | 21.77 | 13.04 |
| GUADALUP<br>E | 1977 | 10.52 | 10.37 | 9.30  | 10.65 | 16.90 | 26.70 | 31.94 | 31.41 | 24.95 | 27.00 | 22.37 | 15.80 |
| GUADALUP<br>E | 1978 | 13.27 | 12.34 | 12.22 | 23.43 | 23.80 | 32.57 | 27.07 | 20.33 | 25.25 | 26.66 | 21.29 | 19.61 |
| GUADALUP<br>E | 1979 | 12.58 | 10.70 | 10.42 | 16.67 | 19.36 | 25.44 | 13.39 | 17.83 | 21.59 | 31.57 | 30.02 | 17.99 |
| GUADALUP<br>E | 1980 | 13.19 | 11.16 | 10.07 | 10.19 | 18.84 | 24.99 | 26.69 | 26.07 | 20.75 | 29.21 | 29.40 | 17.73 |
| GUADALUP<br>E | 1981 | 11.98 | 11.33 | 11.15 | 16.43 | 38.09 | 35.25 | 37.40 | 22.64 | 24.65 | 26.62 | 22.88 | 15.78 |
| GUADALUP<br>E | 1982 | 12.84 | 14.63 | 13.99 | 22.83 | 31.48 | 22.27 | 23.66 | 24.46 | 24.68 | 33.72 | 20.52 | 15.52 |
| GUADALUP<br>E | 1983 | 9.48  | 9.01  | 11.11 | 17.83 | 30.40 | 23.46 | 35.21 | 27.82 | 32.97 | 27.55 | 19.18 | 19.70 |
| GUADALUP<br>E | 1984 | 14.15 | 15.15 | 9.70  | 11.99 | 19.05 | 30.33 | 25.35 | 23.16 | 34.46 | 36.14 | 33.30 | 20.16 |
| GUADALUP<br>E | 1985 | 14.06 | 11.01 | 14.48 | 13.07 | 21.16 | 16.13 | 17.59 | 31.39 | 33.47 | 25.44 | 18.95 | 15.54 |
| GUADALUP<br>E | 1986 | 12.68 | 12.80 | 12.45 | 18.98 | 19.47 | 24.85 | 17.43 | 19.14 | 17.82 | 28.27 | 17.06 | 12.53 |
| GUADALUP<br>E | 1987 | 9.11  | 8.05  | 8.26  | 13.43 | 18.93 | 15.46 | 16.30 | 22.58 | 33.72 | 28.21 | 21.19 | 16.40 |
| GUADALUP<br>E | 1988 | 11.09 | 10.90 | 9.40  | 11.91 | 17.46 | 15.85 | 18.24 | 28.42 | 28.27 | 29.13 | 28.84 | 18.75 |
| GUADALUP<br>E | 1989 | 17.49 | 15.09 | 15.77 | 16.08 | 19.15 | 30.52 | 23.36 | 31.12 | 33.53 | 36.89 | 22.91 | 19.18 |
| GUADALUP<br>E | 1990 | 13.34 | 14.18 | 13.70 | 17.09 | 25.18 | 26.63 | 25.19 | 17.19 | 21.59 | 33.57 | 25.68 | 17.17 |
| GUADALUP<br>E | 1991 | 19.24 | 16.63 | 18.90 | 20.57 | 30.40 | 27.19 | 32.64 | 22.88 | 18.84 | 24.32 | 22.01 | 18.55 |
| GUADALUP<br>E | 1992 | 14.36 | 13.06 | 12.91 | 14.20 | 20.05 | 17.65 | 20.79 | 27.40 | 31.92 | 24.92 | 21.35 | 15.73 |
| GUADALUP<br>E | 1993 | 13.83 | 11.61 | 12.44 | 8.72  | 10.90 | 18.02 | 26.96 | 32.02 | 40.43 | 41.51 | 29.18 | 28.71 |
| GUADALUP<br>E | 1994 | 16.70 | 16.51 | 15.15 | 26.10 | 33.98 | 36.19 | 24.13 | 51.71 | 36.11 | 23.11 | 34.82 | 20.42 |
| GUADALUP<br>E | 1995 | 12.97 | 11.00 | 11.95 | 17.22 | 23.30 | 27.35 | 37.13 | 33.79 | 28.52 | 27.20 | 16.89 | 26.73 |
| GUADALUP<br>E | 1996 | 16.79 | 18.13 | 19.86 | 24.48 | 41.07 | 29.32 | 35.16 | 32.40 | 33.87 | 31.79 | 28.93 | 20.10 |
| GUADALUP<br>E | 1997 | 12.04 | 17.22 | 13.49 | 24.88 | 16.90 | 30.33 | 10.66 | 10.14 | 18.54 | 12.24 | 11.16 | 7.63  |
| GUADALUP<br>E | 1998 | 6.33  | 6.71  | 7.07  | 14.20 | 16.61 | 29.00 | 37.80 | 25.55 | 37.89 | 24.92 | 21.98 | 24.10 |

|               |      |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GUADALUP<br>E | 1999 | 16.70 | 20.13 | 20.45 | 30.07 | 33.73 | 34.99 | 33.30 | 32.24 | 34.35 | 34.41 | 26.14 | 19.14 |
| GUADALUP<br>E | 2000 | 13.40 | 13.95 | 12.67 | 14.66 | 26.08 | 31.65 | 38.17 | 35.60 | 36.10 | 27.50 | 21.19 | 20.13 |
| GUADALUP<br>E | 2001 | 14.46 | 11.79 | 13.47 | 17.69 | 33.62 | 34.85 | 30.36 | 22.40 | 29.77 | 25.09 | 30.16 | 26.56 |
| GUADALUP<br>E | 2002 | 14.58 | 12.10 | 11.76 | 18.54 | 23.89 | 28.02 | 14.85 | 14.74 | 17.68 | 15.35 | 14.12 | 13.78 |
| GUADALUP<br>E | 2003 | 8.90  | 10.03 | 10.43 | 19.91 | 33.82 | 30.78 | 20.52 | 23.17 | 23.20 | 26.54 | 23.27 | 20.02 |
| GUADALUP<br>E | 2004 | 13.66 | 11.16 | 11.91 | 15.40 | 23.69 | 21.31 | 31.35 | 20.62 | 27.81 | 23.80 | 26.70 | 16.56 |
| GUADALUP<br>E | 2005 | 12.70 | 10.34 | 10.05 | 19.47 | 20.63 | 23.63 | 16.94 | 15.91 | 20.45 | 22.28 | 29.14 | 15.19 |
| GUADALUP<br>E | 2006 | 11.61 | 11.26 | 13.79 | 21.09 | 31.46 | 29.84 | 17.69 | 20.99 | 29.99 | 26.18 | 30.59 | 20.80 |
| GUADALUP<br>E | 2007 | 15.40 | 10.60 | 10.97 | 24.62 | 39.30 | 32.27 | 28.01 | 39.46 | 31.52 | 38.04 | 27.91 | 18.37 |
| GUADALUP<br>E | 2008 | 13.84 | 14.84 | 12.76 | 12.40 | 18.04 | 32.91 | 43.36 | 28.49 | 33.37 | 35.97 | 30.91 | 17.86 |
| GUATAPE       | 1959 | 20.39 | 12.77 | 12.79 | 19.22 | 32.13 | 28.45 | 19.76 | 23.27 | 34.19 | 39.72 | 34.40 | 29.89 |
| GUATAPE       | 1960 | 17.55 | 12.58 | 13.56 | 19.51 | 34.87 | 28.19 | 35.35 | 23.58 | 32.82 | 42.40 | 43.38 | 26.35 |
| GUATAPE       | 1961 | 14.06 | 11.90 | 20.19 | 23.82 | 19.89 | 26.68 | 24.27 | 20.13 | 35.93 | 34.82 | 48.21 | 36.34 |
| GUATAPE       | 1962 | 21.42 | 18.16 | 26.47 | 25.27 | 43.42 | 35.80 | 24.10 | 29.24 | 23.79 | 34.93 | 30.74 | 20.93 |
| GUATAPE       | 1963 | 19.26 | 14.45 | 20.29 | 30.71 | 34.38 | 20.66 | 24.53 | 28.05 | 35.56 | 43.05 | 47.87 | 30.39 |
| GUATAPE       | 1964 | 12.64 | 10.40 | 10.85 | 19.85 | 19.90 | 26.02 | 26.32 | 24.48 | 32.12 | 36.05 | 42.75 | 23.08 |
| GUATAPE       | 1965 | 21.59 | 18.19 | 14.68 | 23.40 | 43.60 | 21.91 | 15.53 | 25.10 | 47.43 | 38.50 | 45.94 | 27.12 |
| GUATAPE       | 1966 | 29.67 | 17.76 | 21.16 | 24.67 | 33.18 | 35.63 | 21.48 | 31.05 | 30.42 | 45.31 | 47.75 | 37.01 |
| GUATAPE       | 1967 | 28.18 | 20.84 | 24.04 | 45.73 | 41.48 | 31.48 | 34.56 | 26.48 | 31.91 | 35.95 | 30.31 | 22.97 |
| GUATAPE       | 1968 | 17.65 | 12.76 | 16.59 | 33.61 | 32.65 | 34.88 | 39.35 | 38.82 | 53.71 | 52.75 | 40.73 | 25.74 |
| GUATAPE       | 1969 | 24.67 | 14.89 | 14.36 | 30.20 | 30.84 | 25.63 | 13.29 | 30.74 | 50.09 | 49.03 | 44.67 | 30.63 |
| GUATAPE       | 1970 | 24.57 | 16.17 | 15.31 | 21.70 | 39.14 | 22.97 | 32.97 | 25.42 | 47.75 | 69.02 | 45.73 | 29.88 |
| GUATAPE       | 1971 | 34.03 | 27.76 | 46.79 | 37.33 | 73.60 | 34.14 | 34.14 | 41.08 | 45.94 | 47.11 | 42.10 | 32.87 |
| GUATAPE       | 1972 | 31.51 | 20.80 | 23.13 | 30.45 | 16.65 | 29.76 | 14.41 | 23.62 | 20.22 | 29.19 | 36.99 | 24.88 |
| GUATAPE       | 1973 | 15.79 | 10.62 | 13.83 | 22.22 | 26.13 | 36.30 | 18.36 | 37.53 | 45.22 | 39.25 | 57.47 | 21.57 |
| GUATAPE       | 1974 | 8.41  | 24.97 | 13.96 | 35.48 | 50.34 | 37.97 | 27.19 | 44.20 | 46.78 | 49.03 | 54.02 | 26.09 |
| GUATAPE       | 1975 | 19.14 | 18.24 | 24.65 | 43.16 | 43.36 | 38.23 | 43.83 | 30.91 | 44.72 | 48.23 | 40.41 | 39.44 |
| GUATAPE       | 1976 | 22.96 | 18.33 | 27.93 | 51.17 | 43.30 | 23.70 | 10.93 | 11.45 | 15.13 | 41.59 | 31.76 | 15.61 |
| GUATAPE       | 1977 | 12.93 | 13.35 | 16.84 | 18.26 | 30.38 | 27.14 | 27.28 | 33.90 | 33.18 | 35.02 | 38.61 | 17.72 |
| GUATAPE       | 1978 | 12.35 | 4.85  | 19.48 | 41.12 | 40.41 | 29.21 | 30.34 | 19.89 | 28.34 | 32.92 | 35.11 | 31.57 |
| GUATAPE       | 1979 | 14.69 | 13.90 | 15.67 | 20.79 | 32.33 | 28.98 | 19.70 | 26.41 | 31.50 | 49.12 | 37.57 | 22.49 |
| GUATAPE       | 1980 | 14.47 | 15.45 | 11.65 | 11.10 | 27.55 | 24.09 | 20.65 | 21.82 | 27.84 | 42.91 | 44.83 | 22.41 |
| GUATAPE       | 1981 | 11.81 | 14.96 | 13.56 | 30.49 | 49.70 | 42.73 | 26.95 | 22.31 | 30.16 | 44.36 | 35.64 | 22.89 |
| GUATAPE       | 1982 | 18.33 | 26.28 | 39.93 | 45.89 | 40.32 | 23.24 | 17.74 | 17.93 | 51.06 | 38.33 | 28.58 | 21.02 |
| GUATAPE       | 1983 | 16.71 | 7.51  | 7.39  | 24.18 | 33.33 | 22.29 | 25.81 | 21.65 | 37.24 | 40.68 | 34.05 | 37.35 |
| GUATAPE       | 1984 | 29.04 | 31.27 | 20.22 | 27.03 | 39.65 | 43.90 | 29.82 | 33.16 | 46.28 | 53.14 | 53.43 | 49.54 |
| GUATAPE       | 1985 | 23.88 | 20.78 | 27.47 | 32.68 | 44.88 | 26.69 | 20.44 | 37.02 | 38.12 | 31.68 | 26.57 | 25.93 |
| GUATAPE       | 1986 | 28.33 | 25.83 | 21.74 | 48.08 | 45.18 | 28.74 | 17.56 | 26.56 | 34.87 | 49.27 | 48.57 | 30.95 |

|         |      |       |       |       |       |       |       |       |        |        |       |        |       |
|---------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|
| GUATAPE | 1987 | 19.66 | 16.29 | 28.90 | 28.21 | 45.33 | 29.42 | 40.95 | 48.01  | 66.44  | 71.78 | 53.57  | 25.24 |
| GUATAPE | 1988 | 18.80 | 32.63 | 28.15 | 55.30 | 46.44 | 38.60 | 34.46 | 48.01  | 68.15  | 58.12 | 73.09  | 47.00 |
| GUATAPE | 1989 | 59.00 | 33.07 | 47.23 | 50.24 | 45.69 | 45.38 | 24.40 | 38.49  | 63.65  | 57.68 | 52.67  | 31.75 |
| GUATAPE | 1990 | 26.63 | 22.28 | 19.31 | 34.41 | 27.46 | 34.56 | 28.49 | 32.08  | 49.59  | 77.74 | 56.41  | 39.84 |
| GUATAPE | 1991 | 24.95 | 21.87 | 22.93 | 32.76 | 40.07 | 52.74 | 23.43 | 16.36  | 21.72  | 32.40 | 44.99  | 32.61 |
| GUATAPE | 1992 | 21.33 | 20.76 | 22.67 | 27.98 | 42.19 | 24.04 | 20.84 | 30.46  | 43.08  | 35.63 | 30.36  | 34.31 |
| GUATAPE | 1993 | 28.91 | 14.12 | 23.56 | 36.20 | 34.88 | 15.57 | 24.20 | 25.44  | 59.80  | 53.75 | 37.05  | 30.90 |
| GUATAPE | 1994 | 26.54 | 28.19 | 34.12 | 47.79 | 46.86 | 31.65 | 33.00 | 31.78  | 36.38  | 42.18 | 49.33  | 40.44 |
| GUATAPE | 1995 | 38.19 | 30.47 | 36.50 | 57.67 | 52.81 | 53.27 | 36.75 | 46.16  | 46.90  | 51.28 | 53.15  | 44.29 |
| GUATAPE | 1996 | 31.32 | 35.41 | 41.99 | 59.23 | 58.25 | 46.39 | 39.00 | 37.35  | 38.47  | 63.01 | 45.92  | 34.21 |
| GUATAPE | 1997 | 27.38 | 28.32 | 34.92 | 42.35 | 26.06 | 30.10 | 16.41 | 17.00  | 40.73  | 31.32 | 32.70  | 18.53 |
| GUATAPE | 1998 | 16.80 | 20.50 | 15.50 | 25.60 | 37.40 | 21.80 | 27.10 | 27.50  | 37.50  | 50.70 | 49.30  | 44.20 |
| GUATAPE | 1999 | 42.90 | 42.50 | 34.20 | 46.20 | 41.70 | 44.10 | 32.50 | 33.10  | 49.90  | 58.50 | 46.70  | 39.20 |
| GUATAPE | 2000 | 21.30 | 25.20 | 27.90 | 30.70 | 49.60 | 48.80 | 37.40 | 33.90  | 49.90  | 52.90 | 44.80  | 32.10 |
| GUATAPE | 2001 | 22.36 | 15.36 | 23.69 | 24.35 | 38.20 | 26.75 | 33.25 | 15.88  | 35.03  | 49.54 | 40.65  | 32.86 |
| GUATAPE | 2002 | 24.03 | 21.40 | 23.51 | 36.49 | 24.05 | 33.47 | 20.68 | 19.54  | 35.81  | 37.14 | 29.46  | 28.38 |
| GUATAPE | 2003 | 13.31 | 16.41 | 22.32 | 42.23 | 43.25 | 51.98 | 29.24 | 28.49  | 32.00  | 40.92 | 34.14  | 37.46 |
| GUATAPE | 2004 | 25.31 | 18.80 | 26.37 | 36.37 | 39.64 | 21.37 | 36.43 | 24.56  | 45.79  | 43.62 | 54.81  | 34.40 |
| GUATAPE | 2005 | 23.94 | 14.85 | 16.41 | 32.80 | 43.57 | 49.36 | 31.30 | 28.42  | 34.95  | 41.92 | 59.89  | 27.53 |
| GUATAPE | 2006 | 27.04 | 28.89 | 41.75 | 42.05 | 44.90 | 29.00 | 22.46 | 26.43  | 33.09  | 50.33 | 57.99  | 42.16 |
| GUATAPE | 2007 | 32.01 | 17.70 | 28.29 | 36.55 | 53.91 | 35.06 | 33.54 | 44.61  | 61.37  | 68.76 | 45.46  | 36.33 |
| GUATAPE | 2008 | 30.42 | 30.74 | 38.14 | 43.04 | 54.42 | 37.99 | 51.03 | 48.98  | 44.73  | 56.29 | 64.27  | 35.68 |
| NARE    | 1955 |       |       |       |       |       |       |       | 47.90  | 59.40  | 79.00 | 88.40  | 69.00 |
| NARE    | 1956 | 65.20 | 56.60 | 52.40 | 48.90 | 87.00 | 73.80 | 53.60 | 59.50  | 65.20  | 90.00 | 79.60  | 59.10 |
| NARE    | 1957 | 37.90 | 31.30 | 24.70 | 46.00 | 58.00 | 46.70 | 38.00 | 40.30  | 41.10  | 49.90 | 44.40  | 37.00 |
| NARE    | 1958 | 22.70 | 20.70 | 27.40 | 29.90 | 47.30 | 28.80 | 23.40 | 43.40  | 29.00  | 40.50 | 37.00  | 33.80 |
| NARE    | 1959 | 20.50 | 17.50 | 19.40 | 26.00 | 38.30 | 39.20 | 32.80 | 36.80  | 59.80  | 51.70 | 51.10  | 30.70 |
| NARE    | 1960 | 25.10 | 23.00 | 27.50 | 32.90 | 46.40 | 43.90 | 52.50 | 36.40  | 56.40  | 51.10 | 48.00  | 54.80 |
| NARE    | 1961 | 30.60 | 29.10 | 28.20 | 34.00 | 33.20 | 41.40 | 37.30 | 32.00  | 57.20  | 59.40 | 79.10  | 47.30 |
| NARE    | 1962 | 29.40 | 25.50 | 37.60 | 46.20 | 85.70 | 84.70 | 52.90 | 57.20  | 59.00  | 80.60 | 67.70  | 43.60 |
| NARE    | 1963 | 31.60 | 42.10 | 45.10 | 59.10 | 62.20 | 43.20 | 46.20 | 46.80  | 50.60  | 62.40 | 76.40  | 38.10 |
| NARE    | 1964 | 27.60 | 21.80 | 21.60 | 41.80 | 36.80 | 54.30 | 55.50 | 54.60  | 60.30  | 57.50 | 61.60  | 43.20 |
| NARE    | 1965 | 31.80 | 27.10 | 25.50 | 34.10 | 50.70 | 35.60 | 30.90 | 45.20  | 63.70  | 66.20 | 75.90  | 46.00 |
| NARE    | 1966 | 30.60 | 25.50 | 25.20 | 30.50 | 36.20 | 55.10 | 45.60 | 57.10  | 49.90  | 55.50 | 69.10  | 66.00 |
| NARE    | 1967 | 42.20 | 30.30 | 32.70 | 56.30 | 65.50 | 71.00 | 49.20 | 45.50  | 60.00  | 49.00 | 48.20  | 34.70 |
| NARE    | 1968 | 26.40 | 23.80 | 28.20 | 48.40 | 44.00 | 65.40 | 66.70 | 47.00  | 73.40  | 71.90 | 68.30  | 46.90 |
| NARE    | 1969 | 38.20 | 23.80 | 23.10 | 53.60 | 55.10 | 43.00 | 21.70 | 50.20  | 59.10  | 84.30 | 68.00  | 44.20 |
| NARE    | 1970 | 36.10 | 25.00 | 26.40 | 34.20 | 75.90 | 51.70 | 49.00 | 42.40  | 59.80  | 93.00 | 106.30 | 61.40 |
| NARE    | 1971 | 52.60 | 44.10 | 55.40 | 61.40 | 97.00 | 80.90 | 90.70 | 108.50 | 96.50  | 77.40 | 61.40  | 46.00 |
| NARE    | 1972 | 39.09 | 32.64 | 33.76 | 45.11 | 95.72 | 67.96 | 48.20 | 45.40  | 45.54  | 52.54 | 55.21  | 38.81 |
| NARE    | 1973 | 28.01 | 22.69 | 24.09 | 27.31 | 35.16 | 53.24 | 36.14 | 54.93  | 104.97 | 72.73 | 59.69  | 73.01 |
| NARE    | 1974 | 52.40 | 48.20 | 41.19 | 58.57 | 61.23 | 63.62 | 55.21 | 62.92  | 92.91  | 96.70 | 84.78  | 49.46 |
| NARE    | 1975 | 34.32 | 36.28 | 35.30 | 36.70 | 49.60 | 55.35 | 73.01 | 68.52  | 79.74  | 77.91 | 96.00  | 81.14 |
| NARE    | 1976 | 49.60 | 38.81 | 33.20 | 66.42 | 74.83 | 64.88 | 35.44 | 29.56  | 30.26  | 58.99 | 57.73  | 32.08 |
| NARE    | 1977 | 23.81 | 25.07 | 21.85 | 27.03 | 35.58 | 45.68 | 37.27 | 53.24  | 42.03  | 61.51 | 58.43  | 35.72 |

|       |      |       |       |       |       |        |        |       |        |        |        |        |        |
|-------|------|-------|-------|-------|-------|--------|--------|-------|--------|--------|--------|--------|--------|
| NARE  | 1978 | 34.02 | 30.84 | 43.85 | 95.74 | 76.75  | 68.69  | 67.00 | 41.29  | 46.26  | 58.38  | 54.92  | 46.64  |
| NARE  | 1979 | 32.80 | 29.78 | 33.46 | 44.11 | 59.34  | 60.99  | 37.66 | 45.31  | 64.10  | 67.01  | 83.53  | 55.16  |
| NARE  | 1980 | 35.32 | 29.83 | 25.52 | 31.53 | 36.35  | 42.60  | 32.18 | 33.36  | 32.72  | 62.04  | 60.78  | 45.44  |
| NARE  | 1981 | 27.83 | 23.30 | 26.48 | 40.87 | 86.81  | 90.51  | 65.57 | 41.34  | 68.31  | 69.62  | 74.91  | 50.91  |
| NARE  | 1982 | 50.50 | 46.96 | 40.93 | 71.81 | 95.75  | 47.46  | 32.98 | 32.31  | 34.44  | 51.88  | 53.33  | 35.11  |
| NARE  | 1983 | 26.55 | 24.74 | 25.94 | 48.92 | 51.68  | 39.38  | 41.03 | 35.99  | 48.66  | 48.80  | 41.15  | 47.31  |
| NARE  | 1984 | 43.24 | 33.02 | 28.44 | 30.04 | 59.10  | 83.02  | 66.94 | 56.95  | 61.96  | 84.14  | 82.33  | 45.64  |
| NARE  | 1985 | 32.93 | 30.35 | 36.05 | 43.38 | 76.27  | 44.87  | 34.30 | 73.44  | 74.34  | 56.89  | 59.26  | 45.90  |
| NARE  | 1986 | 31.95 | 37.70 | 41.63 | 53.24 | 47.90  | 52.62  | 38.92 | 37.67  | 40.15  | 75.37  | 56.14  | 38.24  |
| NARE  | 1987 | 27.67 | 25.93 | 24.56 | 33.20 | 55.90  | 31.81  | 34.98 | 48.14  | 51.26  | 78.61  | 63.86  | 48.34  |
| NARE  | 1988 | 32.88 | 31.13 | 30.32 | 36.77 | 42.54  | 57.87  | 61.45 | 82.77  | 91.94  | 87.39  | 104.95 | 76.64  |
| NARE  | 1989 | 55.11 | 42.30 | 44.62 | 49.43 | 62.02  | 66.03  | 40.54 | 50.23  | 80.62  | 83.98  | 67.06  | 50.50  |
| NARE  | 1990 | 35.13 | 35.16 | 30.06 | 43.37 | 55.75  | 49.68  | 44.81 | 33.01  | 47.51  | 82.79  | 62.19  | 44.27  |
| NARE  | 1991 | 31.25 | 26.40 | 30.24 | 42.30 | 55.31  | 50.19  | 39.87 | 38.19  | 31.78  | 55.17  | 43.33  | 40.23  |
| NARE  | 1992 | 28.01 | 24.40 | 24.03 | 27.54 | 39.89  | 35.28  | 25.00 | 35.15  | 49.23  | 40.87  | 38.01  | 49.63  |
| NARE  | 1993 | 34.39 | 25.36 | 28.17 | 37.65 | 61.70  | 33.35  | 43.54 | 43.00  | 69.77  | 60.95  | 74.10  | 53.67  |
| NARE  | 1994 | 35.67 | 31.26 | 31.27 | 51.36 | 55.91  | 47.27  | 38.66 | 33.33  | 41.57  | 72.40  | 67.77  | 39.92  |
| NARE  | 1995 | 26.51 | 22.52 | 33.55 | 35.52 | 59.77  | 64.56  | 60.42 | 89.46  | 57.72  | 58.63  | 48.52  | 54.20  |
| NARE  | 1996 | 41.99 | 37.77 | 54.45 | 52.15 | 87.80  | 79.72  | 79.74 | 58.30  | 59.16  | 77.02  | 49.92  | 41.84  |
| NARE  | 1997 | 41.40 | 40.18 | 40.31 | 48.66 | 35.79  | 61.96  | 30.37 | 24.82  | 28.30  | 32.35  | 37.63  | 25.70  |
| NARE  | 1998 | 18.78 | 18.67 | 18.87 | 24.80 | 44.73  | 43.95  | 48.77 | 47.87  | 71.16  | 62.94  | 58.91  | 74.23  |
| NARE  | 1999 | 51.59 | 67.88 | 83.28 | 71.40 | 87.21  | 74.21  | 49.87 | 37.71  | 85.32  | 89.91  | 104.18 | 110.34 |
| NARE  | 2000 | 50.22 | 51.62 | 52.78 | 50.85 | 88.92  | 108.15 | 87.40 | 80.27  | 107.83 | 88.76  | 73.81  | 45.10  |
| NARE  | 2001 | 40.49 | 30.02 | 36.90 | 34.07 | 46.18  | 46.43  | 41.02 | 27.37  | 35.75  | 38.25  | 51.02  | 42.83  |
| NARE  | 2002 | 27.72 | 25.45 | 27.06 | 65.31 | 57.62  | 57.27  | 38.22 | 28.45  | 33.40  | 40.00  | 51.93  | 38.03  |
| NARE  | 2003 | 23.60 | 22.29 | 31.43 | 45.75 | 48.69  | 79.23  | 40.00 | 35.13  | 40.60  | 50.19  | 65.15  | 47.67  |
| NARE  | 2004 | 33.92 | 29.75 | 35.13 | 50.77 | 69.08  | 49.52  | 59.00 | 42.13  | 76.76  | 79.70  | 109.70 | 53.20  |
| NARE  | 2005 | 38.88 | 32.33 | 36.58 | 49.36 | 87.34  | 80.33  | 53.04 | 36.80  | 48.40  | 79.40  | 87.25  | 46.45  |
| NARE  | 2006 | 39.43 | 34.49 | 39.88 | 70.31 | 103.81 | 68.61  | 39.11 | 42.97  | 58.72  | 61.38  | 86.60  | 53.32  |
| NARE  | 2007 | 35.97 | 29.55 | 30.10 | 61.99 | 97.33  | 71.25  | 46.76 | 59.12  | 83.35  | 112.56 | 84.77  | 63.28  |
| NARE  | 2008 | 48.71 | 55.90 | 73.60 | 64.73 | 102.11 | 93.41  | 88.89 | 101.95 | 85.35  | 100.87 | 116.47 | 64.13  |
| NECHI | 1955 | 3.23  | 2.55  | 2.94  | 4.06  | 5.88   | 4.92   | 5.35  | 4.20   | 4.51   | 6.92   | 5.21   | 4.27   |
| NECHI | 1956 | 3.84  | 3.70  | 3.48  | 4.42  | 6.74   | 6.19   | 4.27  | 4.84   | 4.07   | 5.81   | 5.49   | 3.62   |
| NECHI | 1957 | 2.74  | 2.60  | 2.15  | 3.35  | 5.05   | 3.34   | 3.05  | 2.95   | 3.01   | 4.42   | 3.50   | 3.01   |
| NECHI | 1958 | 2.08  | 1.71  | 2.01  | 1.96  | 3.87   | 2.08   | 1.90  | 2.68   | 1.70   | 2.42   | 1.90   | 2.05   |
| NECHI | 1959 | 1.36  | 1.22  | 1.41  | 1.91  | 3.22   | 3.07   | 3.50  | 2.69   | 3.53   | 4.29   | 4.22   | 2.95   |
| NECHI | 1960 | 2.40  | 2.13  | 1.93  | 3.18  | 3.98   | 3.76   | 3.82  | 3.38   | 3.78   | 4.01   | 3.49   | 4.07   |
| NECHI | 1961 | 2.33  | 2.12  | 2.09  | 3.48  | 3.45   | 4.00   | 4.01  | 2.86   | 3.73   | 3.87   | 4.74   | 3.20   |
| NECHI | 1962 | 2.47  | 2.14  | 2.41  | 2.71  | 5.75   | 4.02   | 3.98  | 3.98   | 3.73   | 4.33   | 4.47   | 3.00   |
| NECHI | 1963 | 2.45  | 2.63  | 2.89  | 4.42  | 5.58   | 3.96   | 5.55  | 3.60   | 3.48   | 4.70   | 4.31   | 3.16   |
| NECHI | 1964 | 2.31  | 2.25  | 2.38  | 3.59  | 4.15   | 4.03   | 4.57  | 3.86   | 3.85   | 4.20   | 3.88   | 3.13   |
| NECHI | 1965 | 2.55  | 2.18  | 2.21  | 3.20  | 4.68   | 3.05   | 2.95  | 3.27   | 4.03   | 4.10   | 3.91   | 2.89   |
| NECHI | 1966 | 2.62  | 2.00  | 2.25  | 2.89  | 3.90   | 4.45   | 3.57  | 3.89   | 3.95   | 4.51   | 4.27   | 3.90   |
| NECHI | 1967 | 2.77  | 2.35  | 2.21  | 4.18  | 6.42   | 6.97   | 6.86  | 4.11   | 3.47   | 3.96   | 3.25   | 2.58   |
| NECHI | 1968 | 2.27  | 2.01  | 2.21  | 2.96  | 4.28   | 4.71   | 4.17  | 4.25   | 4.20   | 4.73   | 3.98   | 3.16   |

|          |      |      |      |      |      |       |      |      |      |      |      |      |      |
|----------|------|------|------|------|------|-------|------|------|------|------|------|------|------|
| NECHI    | 1969 | 2.35 | 2.00 | 1.84 | 4.28 | 5.01  | 2.67 | 2.25 | 4.57 | 4.06 | 5.68 | 6.22 | 3.38 |
| NECHI    | 1970 | 2.89 | 2.34 | 2.37 | 3.71 | 6.35  | 4.13 | 3.86 | 3.37 | 5.03 | 7.08 | 5.94 | 4.75 |
| NECHI    | 1971 | 4.49 | 4.42 | 4.98 | 4.72 | 8.14  | 5.46 | 6.79 | 7.23 | 5.02 | 5.93 | 4.55 | 3.14 |
| NECHI    | 1972 | 3.16 | 2.67 | 2.64 | 4.29 | 7.64  | 5.08 | 4.02 | 3.93 | 3.51 | 5.16 | 3.35 | 3.16 |
| NECHI    | 1973 | 2.27 | 2.03 | 2.05 | 2.71 | 4.21  | 3.17 | 3.33 | 3.11 | 3.85 | 4.28 | 4.67 | 4.00 |
| NECHI    | 1974 | 3.14 | 2.81 | 2.82 | 3.69 | 5.28  | 3.41 | 3.97 | 3.98 | 4.57 | 5.43 | 5.02 | 3.54 |
| NECHI    | 1975 | 2.79 | 2.66 | 3.17 | 3.41 | 5.13  | 5.28 | 5.55 | 5.90 | 5.84 | 7.06 | 6.49 | 5.78 |
| NECHI    | 1976 | 3.43 | 3.08 | 3.33 | 4.98 | 6.71  | 4.74 | 3.31 | 4.12 | 2.88 | 5.40 | 4.04 | 2.57 |
| NECHI    | 1977 | 1.97 | 1.90 | 1.77 | 2.35 | 3.58  | 4.47 | 4.08 | 4.11 | 3.36 | 3.78 | 3.17 | 2.85 |
| NECHI    | 1978 | 2.00 | 1.85 | 2.09 | 5.00 | 4.08  | 4.68 | 4.29 | 3.02 | 3.24 | 4.28 | 4.02 | 3.70 |
| NECHI    | 1979 | 2.29 | 2.22 | 2.11 | 3.21 | 4.66  | 5.24 | 2.58 | 2.70 | 3.03 | 5.65 | 5.71 | 3.80 |
| NECHI    | 1980 | 2.67 | 2.57 | 2.43 | 2.95 | 4.21  | 4.63 | 4.20 | 3.27 | 2.67 | 4.83 | 4.52 | 3.09 |
| NECHI    | 1981 | 2.23 | 2.31 | 2.42 | 3.54 | 8.55  | 5.60 | 5.35 | 3.31 | 3.97 | 5.04 | 4.17 | 3.00 |
| NECHI    | 1982 | 2.42 | 3.02 | 3.26 | 6.18 | 8.25  | 4.32 | 4.67 | 3.47 | 3.15 | 5.18 | 4.06 | 3.79 |
| NECHI    | 1983 | 2.05 | 2.24 | 2.23 | 4.89 | 7.99  | 3.90 | 6.80 | 3.97 | 5.46 | 5.32 | 4.26 | 4.48 |
| NECHI    | 1984 | 2.79 | 2.78 | 1.92 | 2.87 | 6.00  | 6.78 | 4.73 | 5.28 | 7.66 | 7.42 | 7.27 | 4.81 |
| NECHI    | 1985 | 2.90 | 2.53 | 3.40 | 3.85 | 7.17  | 4.09 | 4.86 | 5.69 | 5.97 | 5.67 | 4.20 | 4.46 |
| NECHI    | 1986 | 3.16 | 2.88 | 2.85 | 5.62 | 4.74  | 4.96 | 3.70 | 2.97 | 2.67 | 6.27 | 3.46 | 3.21 |
| NECHI    | 1987 | 1.14 | 1.14 | 0.76 | 3.27 | 6.72  | 4.19 | 6.71 | 3.18 | 5.42 | 6.99 | 3.86 | 3.30 |
| NECHI    | 1988 | 2.31 | 2.97 | 2.37 | 2.34 | 3.43  | 4.06 | 4.82 | 7.46 | 4.31 | 2.52 | 3.98 | 1.88 |
| NECHI    | 1989 | 1.17 | 0.95 | 3.32 | 3.17 | 5.74  | 5.53 | 5.24 | 5.57 | 4.67 | 6.09 | 3.59 | 3.49 |
| NECHI    | 1990 | 2.25 | 2.45 | 2.17 | 3.10 | 6.08  | 4.34 | 4.25 | 2.63 | 2.37 | 5.87 | 5.14 | 3.52 |
| NECHI    | 1991 | 2.92 | 2.83 | 3.29 | 3.53 | 11.64 | 7.22 | 8.03 | 2.86 | 2.20 | 3.33 | 3.74 | 2.86 |
| NECHI    | 1992 | 1.16 | 1.23 | 2.34 | 1.79 | 3.20  | 1.77 | 2.17 | 2.82 | 3.84 | 3.13 | 2.45 | 2.72 |
| NECHI    | 1993 | 2.50 | 2.00 | 2.87 | 3.27 | 5.30  | 3.02 | 3.67 | 3.64 | 4.73 | 3.97 | 3.97 | 4.09 |
| NECHI    | 1994 | 4.58 | 3.86 | 2.89 | 5.61 | 6.71  | 6.71 | 5.09 | 7.70 | 5.30 | 6.68 | 6.15 | 4.51 |
| NECHI    | 1995 | 3.13 | 2.28 | 2.25 | 3.42 | 5.33  | 5.70 | 7.27 | 5.33 | 5.41 | 6.13 | 4.97 | 6.36 |
| NECHI    | 1996 | 3.18 | 3.83 | 4.88 | 5.53 | 10.28 | 6.02 | 7.89 | 6.19 | 5.25 | 7.25 | 6.51 | 4.58 |
| NECHI    | 1997 | 3.43 | 3.66 | 3.78 | 5.08 | 4.56  | 4.16 | 2.62 | 2.17 | 3.66 | 2.38 | 2.79 | 1.80 |
| NECHI    | 1998 | 1.49 | 1.81 | 2.29 | 3.56 | 4.58  | 4.26 | 6.96 | 4.74 | 5.36 | 4.87 | 4.55 | 4.73 |
| NECHI    | 1999 | 2.87 | 4.00 | 4.42 | 6.79 | 9.46  | 7.36 | 6.25 | 4.33 | 5.13 | 7.20 | 5.90 | 4.55 |
| NECHI    | 2000 | 3.01 | 3.36 | 2.64 | 2.92 | 6.03  | 5.22 | 7.77 | 5.70 | 7.28 | 7.08 | 4.98 | 4.73 |
| NECHI    | 2001 | 3.60 | 3.45 | 3.71 | 3.96 | 7.33  | 6.49 | 6.41 | 3.49 | 4.53 | 4.71 | 5.43 | 5.30 |
| NECHI    | 2002 | 3.12 | 2.65 | 2.38 | 2.78 | 3.73  | 3.80 | 2.47 | 1.73 | 1.75 | 2.44 | 2.09 | 2.27 |
| NECHI    | 2003 | 1.56 | 1.74 | 1.95 | 2.86 | 4.18  | 3.83 | 3.04 | 2.57 | 2.56 | 4.96 | 3.90 | 3.53 |
| NECHI    | 2004 | 2.47 | 2.24 | 3.17 | 4.20 | 6.42  | 4.16 | 5.40 | 3.83 | 4.36 | 4.89 | 6.26 | 4.24 |
| NECHI    | 2005 | 3.95 | 3.79 | 4.13 | 5.00 | 6.07  | 5.21 | 4.21 | 3.64 | 3.57 | 5.17 | 6.15 | 3.97 |
| NECHI    | 2006 | 3.03 | 3.26 | 3.68 | 3.64 | 9.41  | 5.90 | 4.38 | 4.14 | 5.25 | 5.91 | 6.72 | 5.21 |
| NECHI    | 2007 | 4.22 | 3.66 | 3.27 | 5.19 | 9.59  | 6.44 | 6.59 | 6.82 | 5.88 | 8.87 | 7.09 | 4.87 |
| NECHI    | 2008 | 4.06 | 4.00 | 4.23 | 4.59 | 5.47  | 5.67 | 7.51 | 4.49 | 5.43 | 8.60 | 7.03 | 3.59 |
| PAJARITO | 1955 | 2.32 | 1.61 | 2.01 | 2.59 | 3.95  | 3.47 | 3.75 | 3.63 | 4.20 | 5.85 | 4.27 | 3.08 |
| PAJARITO | 1956 | 2.76 | 2.33 | 2.38 | 2.82 | 4.53  | 4.37 | 2.99 | 4.18 | 3.78 | 4.91 | 4.50 | 2.61 |
| PAJARITO | 1957 | 1.96 | 1.64 | 1.47 | 2.14 | 3.39  | 2.35 | 2.13 | 2.55 | 2.80 | 3.74 | 2.87 | 2.17 |
| PAJARITO | 1958 | 1.49 | 1.08 | 1.37 | 1.25 | 2.60  | 1.47 | 1.33 | 2.32 | 1.58 | 2.05 | 1.55 | 1.48 |
| PAJARITO | 1959 | 0.98 | 0.77 | 0.96 | 1.22 | 2.16  | 2.16 | 2.45 | 2.33 | 3.28 | 3.63 | 3.46 | 2.13 |

|          |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| PAJARITO | 1960 | 1.72 | 1.34 | 1.32 | 2.04 | 2.67 | 2.65 | 2.67 | 2.92 | 3.52 | 3.39 | 2.86 | 2.94 |
| PAJARITO | 1961 | 1.67 | 1.33 | 1.43 | 2.22 | 2.32 | 2.83 | 2.80 | 2.47 | 3.47 | 3.28 | 3.88 | 2.31 |
| PAJARITO | 1962 | 1.77 | 1.35 | 1.65 | 1.73 | 3.86 | 2.84 | 2.79 | 3.44 | 3.47 | 3.66 | 3.67 | 2.16 |
| PAJARITO | 1963 | 1.76 | 1.66 | 1.98 | 2.83 | 3.75 | 2.79 | 3.89 | 3.11 | 3.24 | 3.97 | 3.53 | 2.28 |
| PAJARITO | 1964 | 1.66 | 1.41 | 1.63 | 2.29 | 2.79 | 2.84 | 3.20 | 3.33 | 3.58 | 3.56 | 3.18 | 2.26 |
| PAJARITO | 1965 | 1.83 | 1.37 | 1.51 | 2.05 | 3.14 | 2.16 | 2.07 | 2.82 | 3.75 | 3.47 | 3.21 | 2.09 |
| PAJARITO | 1966 | 1.88 | 1.26 | 1.54 | 1.85 | 2.62 | 3.14 | 2.50 | 3.36 | 3.68 | 3.81 | 3.50 | 2.82 |
| PAJARITO | 1967 | 1.99 | 1.48 | 1.51 | 2.67 | 4.31 | 4.92 | 4.80 | 3.55 | 3.23 | 3.35 | 2.67 | 1.86 |
| PAJARITO | 1968 | 1.63 | 1.26 | 1.51 | 1.89 | 2.88 | 3.32 | 2.92 | 3.67 | 3.91 | 4.00 | 3.26 | 2.28 |
| PAJARITO | 1969 | 1.68 | 1.26 | 1.26 | 2.73 | 3.37 | 1.89 | 1.58 | 3.94 | 3.78 | 4.81 | 5.10 | 2.44 |
| PAJARITO | 1970 | 2.07 | 1.47 | 1.62 | 2.38 | 4.27 | 2.92 | 2.70 | 2.91 | 4.68 | 5.99 | 4.87 | 3.43 |
| PAJARITO | 1971 | 3.22 | 2.78 | 3.40 | 3.01 | 5.47 | 3.85 | 4.75 | 6.24 | 4.67 | 5.02 | 3.73 | 2.27 |
| PAJARITO | 1972 | 2.27 | 1.68 | 1.81 | 2.75 | 5.13 | 3.59 | 2.81 | 3.39 | 3.27 | 4.36 | 2.75 | 2.29 |
| PAJARITO | 1973 | 1.63 | 1.28 | 1.40 | 1.74 | 2.83 | 2.24 | 2.33 | 2.69 | 3.58 | 3.62 | 3.83 | 2.89 |
| PAJARITO | 1974 | 2.25 | 1.77 | 1.93 | 2.36 | 3.55 | 2.40 | 2.78 | 3.44 | 4.25 | 4.60 | 4.12 | 2.55 |
| PAJARITO | 1975 | 2.00 | 1.67 | 2.17 | 2.18 | 3.45 | 3.73 | 3.88 | 5.10 | 5.44 | 5.98 | 5.32 | 4.18 |
| PAJARITO | 1976 | 2.46 | 1.94 | 2.28 | 3.18 | 4.51 | 3.34 | 2.32 | 3.56 | 2.68 | 4.57 | 3.31 | 1.86 |
| PAJARITO | 1977 | 1.41 | 1.19 | 1.21 | 1.51 | 2.41 | 3.16 | 2.86 | 3.55 | 3.12 | 3.19 | 2.60 | 2.06 |
| PAJARITO | 1978 | 1.44 | 1.17 | 1.43 | 3.19 | 2.74 | 3.30 | 3.00 | 2.61 | 3.02 | 3.62 | 3.29 | 2.68 |
| PAJARITO | 1979 | 1.64 | 1.40 | 1.45 | 2.06 | 3.13 | 3.70 | 1.80 | 2.33 | 2.82 | 4.78 | 4.68 | 2.75 |
| PAJARITO | 1980 | 1.91 | 1.62 | 1.67 | 1.88 | 2.83 | 3.27 | 2.94 | 2.82 | 2.49 | 4.09 | 3.71 | 2.23 |
| PAJARITO | 1981 | 1.60 | 1.45 | 1.65 | 2.27 | 5.74 | 3.95 | 3.74 | 2.86 | 3.70 | 4.26 | 3.42 | 2.17 |
| PAJARITO | 1982 | 1.74 | 1.90 | 2.23 | 3.95 | 5.54 | 3.05 | 3.27 | 2.99 | 2.93 | 4.39 | 3.33 | 2.73 |
| PAJARITO | 1983 | 1.47 | 1.41 | 1.52 | 3.13 | 5.37 | 2.75 | 4.76 | 3.43 | 5.08 | 4.51 | 3.49 | 3.24 |
| PAJARITO | 1984 | 2.00 | 1.75 | 1.31 | 1.83 | 4.03 | 4.79 | 3.31 | 4.56 | 7.13 | 6.27 | 5.96 | 3.47 |
| PAJARITO | 1985 | 2.08 | 1.59 | 2.32 | 2.46 | 4.82 | 2.88 | 3.40 | 4.92 | 5.55 | 4.80 | 3.44 | 3.22 |
| PAJARITO | 1986 | 2.26 | 1.82 | 1.95 | 3.60 | 3.19 | 3.50 | 2.59 | 2.57 | 2.48 | 5.31 | 2.83 | 2.32 |
| PAJARITO | 1987 | 0.82 | 0.72 | 0.52 | 2.09 | 4.51 | 2.96 | 4.69 | 2.75 | 5.04 | 5.91 | 3.16 | 2.39 |
| PAJARITO | 1988 | 1.66 | 1.87 | 1.62 | 1.50 | 2.30 | 2.87 | 3.37 | 6.44 | 4.01 | 2.13 | 3.26 | 1.36 |
| PAJARITO | 1989 | 0.84 | 0.60 | 2.27 | 2.02 | 3.85 | 3.90 | 3.66 | 4.81 | 4.34 | 5.16 | 2.94 | 2.52 |
| PAJARITO | 1990 | 1.61 | 1.54 | 1.49 | 1.98 | 4.09 | 3.06 | 2.98 | 2.27 | 2.20 | 4.97 | 4.21 | 2.54 |
| PAJARITO | 1991 | 2.09 | 1.78 | 2.25 | 2.25 | 7.82 | 5.10 | 5.62 | 2.47 | 2.04 | 2.82 | 3.06 | 2.06 |
| PAJARITO | 1992 | 0.83 | 0.78 | 1.60 | 1.15 | 2.15 | 1.25 | 1.52 | 2.43 | 3.58 | 2.65 | 2.00 | 1.96 |
| PAJARITO | 1993 | 1.79 | 1.26 | 1.97 | 2.09 | 3.56 | 2.13 | 2.57 | 3.15 | 4.40 | 3.36 | 3.25 | 2.96 |
| PAJARITO | 1994 | 3.29 | 2.43 | 1.98 | 3.58 | 4.50 | 4.73 | 3.56 | 6.65 | 4.93 | 5.65 | 5.04 | 3.26 |
| PAJARITO | 1995 | 2.25 | 1.44 | 1.54 | 2.18 | 3.58 | 4.02 | 5.09 | 4.60 | 5.03 | 5.18 | 4.08 | 4.59 |
| PAJARITO | 1996 | 2.28 | 2.41 | 3.34 | 3.53 | 6.91 | 4.25 | 5.52 | 5.34 | 4.89 | 6.13 | 5.34 | 3.31 |
| PAJARITO | 1997 | 2.46 | 2.31 | 2.59 | 3.24 | 3.06 | 2.93 | 1.83 | 1.88 | 3.40 | 2.02 | 2.29 | 1.30 |
| PAJARITO | 1998 | 1.07 | 1.14 | 1.57 | 2.27 | 3.08 | 3.01 | 4.87 | 4.09 | 4.98 | 4.12 | 3.73 | 3.42 |
| PAJARITO | 1999 | 2.06 | 2.52 | 3.03 | 4.34 | 6.35 | 5.20 | 4.37 | 3.74 | 4.77 | 6.09 | 4.84 | 3.29 |
| PAJARITO | 2000 | 2.16 | 2.12 | 1.81 | 1.86 | 4.05 | 3.68 | 5.44 | 4.92 | 6.77 | 5.99 | 4.08 | 3.42 |
| PAJARITO | 2001 | 2.58 | 2.17 | 2.54 | 2.53 | 4.92 | 4.58 | 4.48 | 3.02 | 4.21 | 3.99 | 4.45 | 3.83 |
| PAJARITO | 2002 | 2.23 | 1.67 | 1.63 | 1.78 | 2.50 | 2.68 | 1.73 | 1.50 | 1.63 | 2.07 | 1.71 | 1.64 |
| PAJARITO | 2003 | 1.12 | 1.09 | 1.33 | 1.83 | 2.81 | 2.70 | 2.12 | 2.22 | 2.38 | 4.20 | 3.19 | 2.55 |
| PAJARITO | 2004 | 1.77 | 1.41 | 2.17 | 2.69 | 4.31 | 2.94 | 3.78 | 3.31 | 4.06 | 4.14 | 5.13 | 3.06 |

|                |      |       |        |       |        |        |        |        |        |        |        |        |        |
|----------------|------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PAJARITO       | 2005 | 2.83  | 2.39   | 2.82  | 3.19   | 4.08   | 3.68   | 2.94   | 3.14   | 3.32   | 4.38   | 5.04   | 2.87   |
| PAJARITO       | 2006 | 2.17  | 2.05   | 2.52  | 2.32   | 6.32   | 4.17   | 3.07   | 3.58   | 4.89   | 5.00   | 5.51   | 3.76   |
| PAJARITO       | 2007 | 3.03  | 2.31   | 2.24  | 3.32   | 6.44   | 4.55   | 4.61   | 5.89   | 5.47   | 7.51   | 5.81   | 3.51   |
| PAJARITO       | 2008 | 2.91  | 2.52   | 2.89  | 2.93   | 3.68   | 4.00   | 5.25   | 3.88   | 5.05   | 7.28   | 5.76   | 2.59   |
| PORCE2         | 1972 |       |        |       |        |        | 97.46  | 72.31  | 73.10  | 67.80  | 86.13  | 88.92  | 62.03  |
| PORCE2         | 1973 | 43.88 | 31.31  | 36.71 | 47.74  | 70.52  | 89.00  | 67.49  | 94.14  | 126.67 | 97.97  | 96.21  | 86.19  |
| PORCE2         | 1974 | 71.85 | 62.48  | 63.38 | 73.44  | 84.80  | 70.23  | 67.38  | 92.88  | 124.33 | 125.85 | 113.95 | 67.95  |
| PORCE2         | 1975 | 54.06 | 62.74  | 62.31 | 61.77  | 85.27  | 81.03  | 111.12 | 109.37 | 100.82 | 117.03 | 117.84 | 97.98  |
| PORCE2         | 1976 | 63.80 | 54.45  | 54.23 | 82.69  | 88.26  | 78.29  | 44.08  | 47.46  | 46.69  | 67.56  | 53.69  | 38.45  |
| PORCE2         | 1977 | 52.00 | 53.86  | 55.01 | 53.93  | 60.64  | 81.21  | 68.45  | 61.36  | 78.39  | 76.85  | 67.07  | 47.25  |
| PORCE2         | 1978 | 42.16 | 39.20  | 40.59 | 42.86  | 74.42  | 76.60  | 70.75  | 54.82  | 59.03  | 61.93  | 66.47  | 58.26  |
| PORCE2         | 1979 | 45.68 | 44.10  | 42.60 | 51.76  | 106.17 | 89.01  | 50.09  | 50.97  | 60.63  | 86.24  | 97.38  | 62.40  |
| PORCE2         | 1980 | 48.59 | 39.01  | 39.08 | 37.52  | 47.52  | 46.30  | 43.54  | 49.65  | 51.45  | 115.89 | 96.15  | 65.48  |
| PORCE2         | 1981 | 40.11 | 42.26  | 41.58 | 66.42  | 129.24 | 125.37 | 105.94 | 76.53  | 89.76  | 111.03 | 74.52  | 47.96  |
| PORCE2         | 1982 | 59.07 | 61.73  | 56.92 | 106.59 | 138.18 | 91.50  | 68.84  | 65.20  | 79.98  | 109.86 | 88.57  | 69.92  |
| PORCE2         | 1983 | 48.81 | 36.58  | 36.86 | 65.07  | 82.11  | 60.65  | 65.98  | 55.44  | 83.87  | 76.07  | 73.64  | 69.31  |
| PORCE2         | 1984 | 55.92 | 48.37  | 36.26 | 42.07  | 86.97  | 102.26 | 99.31  | 92.05  | 128.49 | 151.27 | 135.28 | 71.68  |
| PORCE2         | 1985 | 53.63 | 45.59  | 44.13 | 46.92  | 78.81  | 55.34  | 50.68  | 86.00  | 111.62 | 95.52  | 78.62  | 62.05  |
| PORCE2         | 1986 | 52.41 | 52.83  | 47.42 | 79.59  | 87.53  | 82.13  | 56.46  | 70.61  | 63.85  | 117.85 | 85.87  | 63.44  |
| PORCE2         | 1987 | 46.37 | 41.31  | 42.79 | 57.30  | 84.71  | 55.46  | 81.31  | 72.58  | 92.72  | 120.63 | 86.97  | 72.67  |
| PORCE2         | 1988 | 47.80 | 46.13  | 38.88 | 51.45  | 65.27  | 71.59  | 74.69  | 127.96 | 170.65 | 144.57 | 158.16 | 97.93  |
| PORCE2         | 1989 | 83.47 | 65.40  | 68.89 | 66.30  | 89.11  | 96.30  | 64.95  | 94.94  | 148.48 | 125.15 | 96.39  | 70.78  |
| PORCE2         | 1990 | 50.26 | 47.39  | 40.71 | 62.56  | 77.98  | 81.09  | 68.56  | 52.90  | 79.61  | 149.41 | 104.90 | 70.70  |
| PORCE2         | 1991 | 45.09 | 39.76  | 43.92 | 52.48  | 74.80  | 71.20  | 67.46  | 43.37  | 43.58  | 73.77  | 79.15  | 61.60  |
| PORCE2         | 1992 | 39.81 | 35.98  | 27.22 | 35.90  | 53.00  | 42.90  | 43.71  | 56.57  | 78.72  | 64.59  | 55.47  | 56.91  |
| PORCE2         | 1993 | 46.10 | 37.33  | 41.83 | 56.46  | 82.43  | 47.65  | 63.71  | 63.30  | 110.22 | 99.94  | 116.37 | 97.29  |
| PORCE2         | 1994 | 57.78 | 51.74  | 35.61 | 80.12  | 86.26  | 67.14  | 58.81  | 75.40  | 80.31  | 93.68  | 118.10 | 67.92  |
| PORCE2         | 1995 | 44.13 | 38.93  | 42.70 | 52.50  | 77.12  | 91.49  | 95.60  | 146.70 | 103.83 | 125.72 | 84.43  | 80.52  |
| PORCE2         | 1996 | 63.88 | 67.24  | 85.77 | 91.33  | 137.29 | 120.64 | 102.04 | 110.21 | 97.23  | 121.00 | 93.46  | 62.82  |
| PORCE2         | 1997 | 60.03 | 62.12  | 51.95 | 71.63  | 57.03  | 102.19 | 45.32  | 36.85  | 55.29  | 50.83  | 59.54  | 38.70  |
| PORCE2         | 1998 | 28.69 | 29.02  | 31.31 | 48.90  | 85.38  | 68.09  | 98.46  | 80.03  | 126.09 | 105.70 | 94.20  | 103.86 |
| PORCE2         | 1999 | 72.59 | 100.24 | 92.90 | 97.11  | 132.43 | 143.11 | 108.58 | 78.66  | 122.59 | 169.05 | 137.06 | 99.32  |
| PORCE2         | 2000 | 72.59 | 65.85  | 63.50 | 66.72  | 124.45 | 136.43 | 123.59 | 118.20 | 161.10 | 125.32 | 82.45  | 72.00  |
| PORCE2         | 2001 | 59.30 | 49.48  | 59.08 | 56.97  | 77.57  | 78.14  | 84.72  | 53.33  | 82.90  | 93.49  | 85.91  | 78.76  |
| PORCE2         | 2002 | 49.39 | 34.42  | 42.39 | 81.90  | 86.06  | 93.96  | 62.86  | 54.01  | 65.24  | 68.09  | 72.88  | 60.43  |
| PORCE2         | 2003 | 42.17 | 43.19  | 46.52 | 75.41  | 96.44  | 121.34 | 71.19  | 76.53  | 81.65  | 111.05 | 106.96 | 84.11  |
| PORCE2         | 2004 | 63.08 | 53.88  | 58.47 | 75.13  | 103.79 | 77.27  | 107.05 | 76.54  | 117.79 | 142.65 | 152.06 | 81.52  |
| PORCE2         | 2005 | 64.78 | 50.37  | 50.23 | 68.96  | 109.04 | 104.80 | 82.64  | 65.63  | 76.39  | 124.91 | 134.71 | 75.93  |
| PORCE2         | 2006 | 64.19 | 56.60  | 73.92 | 113.06 | 148.69 | 131.37 | 68.09  | 74.26  | 97.81  | 101.17 | 143.57 | 92.31  |
| PORCE2         | 2007 | 66.50 | 51.49  | 58.40 | 101.03 | 159.85 | 111.93 | 91.91  | 116.29 | 114.67 | 180.47 | 122.38 | 90.68  |
| PORCE2         | 2008 | 67.51 | 80.00  | 86.84 | 96.17  | 148.75 | 171.84 | 176.76 | 165.83 | 141.91 | 169.10 | 154.48 | 94.52  |
| QUEBRADO<br>NA | 1942 | 0.24  | 0.25   | 0.37  | 0.67   | 0.80   | 0.55   | 0.44   | 0.52   | 0.46   | 0.78   | 0.77   | 0.54   |
| QUEBRADO<br>NA | 1943 | 0.51  | 0.43   | 0.45  | 0.94   | 0.72   | 0.59   | 0.42   | 0.45   | 0.42   | 0.81   | 0.63   | 0.41   |

|                |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| QUEBRADO<br>NA | 1944 | 0.31 | 0.31 | 0.32 | 0.32 | 0.85 | 0.93 | 0.46 | 0.43 | 0.58 | 0.76 | 0.58 | 0.36 |
| QUEBRADO<br>NA | 1945 | 0.29 | 0.21 | 0.27 | 0.51 | 0.80 | 0.41 | 0.44 | 0.62 | 0.42 | 0.59 | 0.58 | 0.60 |
| QUEBRADO<br>NA | 1946 | 0.54 | 0.32 | 0.42 | 0.64 | 0.58 | 0.37 | 0.30 | 0.37 | 0.36 | 0.47 | 0.47 | 0.48 |
| QUEBRADO<br>NA | 1947 | 0.35 | 0.26 | 0.22 | 0.29 | 0.45 | 0.50 | 0.53 | 0.42 | 0.52 | 0.68 | 0.46 | 0.34 |
| QUEBRADO<br>NA | 1948 | 0.25 | 0.22 | 0.24 | 0.51 | 0.57 | 0.51 | 0.64 | 0.36 | 0.33 | 0.36 | 0.62 | 0.35 |
| QUEBRADO<br>NA | 1949 | 0.20 | 0.22 | 0.29 | 0.36 | 0.47 | 0.39 | 0.58 | 0.45 | 0.42 | 0.66 | 0.60 | 0.47 |
| QUEBRADO<br>NA | 1950 | 0.27 | 0.32 | 0.35 | 0.32 | 0.55 | 0.86 | 0.58 | 0.88 | 0.51 | 0.70 | 0.60 | 0.62 |
| QUEBRADO<br>NA | 1951 | 0.42 | 0.51 | 0.40 | 0.50 | 0.52 | 0.41 | 0.50 | 0.42 | 0.43 | 0.41 | 0.48 | 0.35 |
| QUEBRADO<br>NA | 1952 | 0.28 | 0.24 | 0.28 | 0.38 | 0.44 | 0.40 | 0.45 | 0.70 | 0.67 | 0.57 | 0.71 | 0.36 |
| QUEBRADO<br>NA | 1953 | 0.24 | 0.23 | 0.20 | 0.30 | 0.52 | 0.38 | 0.28 | 0.23 | 0.33 | 0.53 | 0.67 | 0.49 |
| QUEBRADO<br>NA | 1954 | 0.23 | 0.26 | 0.21 | 0.40 | 0.48 | 0.60 | 0.76 | 0.56 | 0.44 | 0.77 | 0.68 | 0.56 |
| QUEBRADO<br>NA | 1955 | 0.37 | 0.34 | 0.42 | 0.56 | 0.64 | 0.68 | 0.57 | 0.57 | 0.67 | 0.88 | 0.84 | 0.75 |
| QUEBRADO<br>NA | 1956 | 0.61 | 0.78 | 0.55 | 0.65 | 0.80 | 0.81 | 0.63 | 0.71 | 0.66 | 0.96 | 0.64 | 0.59 |
| QUEBRADO<br>NA | 1957 | 0.36 | 0.36 | 0.29 | 0.54 | 0.65 | 0.45 | 0.41 | 0.46 | 0.50 | 0.66 | 0.57 | 0.35 |
| QUEBRADO<br>NA | 1958 | 0.27 | 0.21 | 0.27 | 0.29 | 0.50 | 0.32 | 0.21 | 0.38 | 0.23 | 0.40 | 0.37 | 0.38 |
| QUEBRADO<br>NA | 1959 | 0.20 | 0.16 | 0.22 | 0.32 | 0.39 | 0.41 | 0.41 | 0.39 | 0.51 | 0.57 | 0.60 | 0.32 |
| QUEBRADO<br>NA | 1960 | 0.30 | 0.28 | 0.28 | 0.49 | 0.50 | 0.42 | 0.49 | 0.46 | 0.56 | 0.57 | 0.56 | 0.50 |
| QUEBRADO<br>NA | 1961 | 0.27 | 0.28 | 0.30 | 0.47 | 0.35 | 0.47 | 0.43 | 0.34 | 0.48 | 0.48 | 0.72 | 0.39 |
| QUEBRADO<br>NA | 1962 | 0.30 | 0.26 | 0.34 | 0.42 | 0.78 | 0.58 | 0.47 | 0.57 | 0.56 | 0.67 | 0.63 | 0.43 |
| QUEBRADO<br>NA | 1963 | 0.31 | 0.37 | 0.39 | 0.71 | 0.74 | 0.49 | 0.58 | 0.51 | 0.45 | 0.61 | 0.73 | 0.40 |
| QUEBRADO<br>NA | 1964 | 0.29 | 0.31 | 0.27 | 0.54 | 0.44 | 0.61 | 0.57 | 0.54 | 0.63 | 0.59 | 0.64 | 0.43 |
| QUEBRADO<br>NA | 1965 | 0.33 | 0.26 | 0.22 | 0.39 | 0.48 | 0.37 | 0.29 | 0.40 | 0.50 | 0.62 | 0.72 | 0.47 |
| QUEBRADO<br>NA | 1966 | 0.39 | 0.23 | 0.26 | 0.32 | 0.40 | 0.52 | 0.39 | 0.46 | 0.48 | 0.68 | 0.68 | 0.57 |
| QUEBRADO<br>NA | 1967 | 0.34 | 0.40 | 0.37 | 0.49 | 0.62 | 0.77 | 0.60 | 0.44 | 0.47 | 0.48 | 0.57 | 0.34 |
| QUEBRADO<br>NA | 1968 | 0.27 | 0.28 | 0.26 | 0.47 | 0.56 | 0.64 | 0.58 | 0.47 | 0.65 | 0.74 | 0.68 | 0.45 |
| QUEBRADO<br>NA | 1969 | 0.33 | 0.25 | 0.20 | 0.46 | 0.46 | 0.41 | 0.19 | 0.51 | 0.54 | 0.59 | 0.63 | 0.43 |
| QUEBRADO<br>NA | 1970 | 0.35 | 0.30 | 0.25 | 0.46 | 0.71 | 0.54 | 0.43 | 0.47 | 0.68 | 0.96 | 0.98 | 0.67 |

|                |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| QUEBRADO<br>NA | 1971 | 0.66 | 0.65 | 0.79 | 0.74 | 1.08 | 0.81 | 0.84 | 0.93 | 0.85 | 0.93 | 0.85 | 0.52 |
| QUEBRADO<br>NA | 1972 | 0.47 | 0.40 | 0.43 | 0.57 | 0.87 | 0.64 | 0.49 | 0.50 | 0.44 | 0.57 | 0.58 | 0.39 |
| QUEBRADO<br>NA | 1973 | 0.27 | 0.19 | 0.22 | 0.33 | 0.48 | 0.50 | 0.42 | 0.46 | 0.73 | 0.73 | 0.69 | 0.71 |
| QUEBRADO<br>NA | 1974 | 0.55 | 0.53 | 0.48 | 0.56 | 0.60 | 0.47 | 0.52 | 0.62 | 0.87 | 0.95 | 0.85 | 0.45 |
| QUEBRADO<br>NA | 1975 | 0.31 | 0.39 | 0.49 | 0.35 | 0.53 | 0.57 | 0.78 | 0.73 | 0.88 | 0.77 | 0.96 | 0.82 |
| QUEBRADO<br>NA | 1976 | 0.42 | 0.37 | 0.47 | 0.61 | 0.74 | 0.61 | 0.38 | 0.35 | 0.35 | 0.74 | 0.53 | 0.31 |
| QUEBRADO<br>NA | 1977 | 0.21 | 0.17 | 0.18 | 0.29 | 0.42 | 0.49 | 0.45 | 0.52 | 0.41 | 0.55 | 0.63 | 0.32 |
| QUEBRADO<br>NA | 1978 | 0.21 | 0.19 | 0.32 | 0.69 | 0.48 | 0.60 | 0.45 | 0.33 | 0.44 | 0.57 | 0.63 | 0.48 |
| QUEBRADO<br>NA | 1979 | 0.24 | 0.24 | 0.32 | 0.44 | 0.43 | 0.49 | 0.28 | 0.30 | 0.48 | 0.66 | 0.82 | 0.42 |
| QUEBRADO<br>NA | 1980 | 0.30 | 0.29 | 0.21 | 0.34 | 0.39 | 0.50 | 0.37 | 0.35 | 0.40 | 0.61 | 0.55 | 0.45 |
| QUEBRADO<br>NA | 1981 | 0.28 | 0.23 | 0.34 | 0.48 | 0.86 | 0.73 | 0.66 | 0.47 | 0.64 | 0.77 | 0.68 | 0.52 |
| QUEBRADO<br>NA | 1982 | 0.51 | 0.57 | 0.51 | 0.81 | 0.92 | 0.60 | 0.46 | 0.39 | 0.42 | 0.64 | 0.53 | 0.48 |
| QUEBRADO<br>NA | 1983 | 0.27 | 0.24 | 0.34 | 0.48 | 0.59 | 0.35 | 0.52 | 0.43 | 0.53 | 0.53 | 0.56 | 0.59 |
| QUEBRADO<br>NA | 1984 | 0.45 | 0.44 | 0.28 | 0.36 | 0.63 | 0.64 | 0.59 | 0.55 | 0.72 | 0.93 | 0.82 | 0.52 |
| QUEBRADO<br>NA | 1985 | 0.35 | 0.30 | 0.37 | 0.44 | 0.59 | 0.43 | 0.36 | 0.60 | 0.78 | 0.68 | 0.58 | 0.44 |
| QUEBRADO<br>NA | 1986 | 0.35 | 0.42 | 0.36 | 0.61 | 0.47 | 0.57 | 0.38 | 0.33 | 0.34 | 0.75 | 0.53 | 0.34 |
| QUEBRADO<br>NA | 1987 | 0.26 | 0.23 | 0.21 | 0.26 | 0.49 | 0.24 | 0.29 | 0.35 | 0.48 | 0.67 | 0.43 | 0.36 |
| QUEBRADO<br>NA | 1988 | 0.22 | 0.23 | 0.16 | 0.34 | 0.37 | 0.41 | 0.41 | 0.70 | 0.73 | 0.78 | 0.89 | 0.70 |
| QUEBRADO<br>NA | 1989 | 0.54 | 0.45 | 0.44 | 0.41 | 0.59 | 0.50 | 0.38 | 0.46 | 0.62 | 0.65 | 0.61 | 0.39 |
| QUEBRADO<br>NA | 1990 | 0.33 | 0.36 | 0.35 | 0.48 | 0.52 | 0.41 | 0.36 | 0.28 | 0.39 | 0.79 | 0.50 | 0.35 |
| QUEBRADO<br>NA | 1991 | 0.30 | 0.21 | 0.35 | 0.35 | 0.50 | 0.40 | 0.38 | 0.37 | 0.30 | 0.53 | 0.55 | 0.44 |
| QUEBRADO<br>NA | 1992 | 0.24 | 0.24 | 0.28 | 0.25 | 0.37 | 0.28 | 0.27 | 0.33 | 0.40 | 0.32 | 0.38 | 0.45 |
| QUEBRADO<br>NA | 1993 | 0.31 | 0.19 | 0.24 | 0.36 | 0.57 | 0.25 | 0.33 | 0.34 | 0.58 | 0.60 | 0.73 | 0.61 |
| QUEBRADO<br>NA | 1994 | 0.32 | 0.36 | 0.49 | 0.59 | 0.51 | 0.51 | 0.39 | 0.47 | 0.42 | 0.57 | 0.64 | 0.34 |
| QUEBRADO<br>NA | 1995 | 0.24 | 0.20 | 0.24 | 0.30 | 0.43 | 0.48 | 0.53 | 0.74 | 0.58 | 0.70 | 0.57 | 0.61 |
| QUEBRADO<br>NA | 1996 | 0.43 | 0.42 | 0.68 | 0.54 | 0.84 | 0.85 | 0.97 | 0.59 | 0.52 | 0.66 | 0.57 | 0.39 |
| QUEBRADO<br>NA | 1997 | 0.38 | 0.36 | 0.31 | 0.46 | 0.34 | 0.44 | 0.24 | 0.19 | 0.22 | 0.21 | 0.36 | 0.21 |

|             |      |      |      |      |      |      |       |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| QUEBRADO NA | 1998 | 0.16 | 0.15 | 0.18 | 0.40 | 0.49 | 0.45  | 0.54 | 0.45 | 0.70 | 0.57 | 0.57 | 0.61 |
| QUEBRADO NA | 1999 | 0.51 | 0.56 | 0.70 | 0.69 | 0.67 | 0.69  | 0.52 | 0.54 | 0.81 | 0.75 | 0.64 | 0.68 |
| QUEBRADO NA | 2000 | 0.41 | 0.44 | 0.42 | 0.48 | 0.65 | 0.67  | 0.61 | 0.60 | 0.80 | 0.58 | 0.55 | 0.40 |
| QUEBRADO NA | 2001 | 0.31 | 0.26 | 0.39 | 0.31 | 0.47 | 0.53  | 0.46 | 0.28 | 0.42 | 0.46 | 0.60 | 0.47 |
| QUEBRADO NA | 2002 | 0.29 | 0.23 | 0.28 | 0.44 | 0.46 | 0.57  | 0.29 | 0.24 | 0.22 | 0.32 | 0.34 | 0.39 |
| QUEBRADO NA | 2003 | 0.19 | 0.22 | 0.25 | 0.41 | 0.46 | 0.56  | 0.31 | 0.32 | 0.37 | 0.50 | 0.51 | 0.45 |
| QUEBRADO NA | 2004 | 0.33 | 0.25 | 0.24 | 0.30 | 0.45 | 0.36  | 0.53 | 0.33 | 0.51 | 0.49 | 0.63 | 0.41 |
| QUEBRADO NA | 2005 | 0.30 | 0.23 | 0.20 | 0.33 | 0.52 | 0.44  | 0.32 | 0.27 | 0.32 | 0.59 | 0.64 | 0.40 |
| QUEBRADO NA | 2006 | 0.33 | 0.26 | 0.38 | 0.57 | 0.85 | 0.65  | 0.35 | 0.36 | 0.48 | 0.49 | 0.78 | 0.51 |
| QUEBRADO NA | 2007 | 0.32 | 0.23 | 0.31 | 0.62 | 0.77 | 0.73  | 0.45 | 0.58 | 0.57 | 0.82 | 0.79 | 0.54 |
| QUEBRADO NA | 2008 | 0.37 | 0.38 | 0.45 | 0.46 | 0.64 | 0.80  | 0.85 | 0.77 | 0.70 | 0.82 | 0.90 | 0.49 |
| TENCHE      | 1955 | 3.30 | 2.35 | 3.29 | 4.13 | 6.24 | 5.96  | 6.82 | 5.54 | 6.04 | 7.68 | 7.15 | 6.03 |
| TENCHE      | 1956 | 4.43 | 4.34 | 3.70 | 4.41 | 6.12 | 6.66  | 5.47 | 7.70 | 5.31 | 7.67 | 8.14 | 6.33 |
| TENCHE      | 1957 | 2.58 | 2.72 | 2.02 | 3.48 | 4.96 | 4.89  | 3.95 | 3.85 | 4.37 | 4.67 | 4.26 | 4.19 |
| TENCHE      | 1958 | 1.93 | 1.64 | 1.85 | 1.83 | 4.06 | 2.59  | 2.43 | 3.78 | 2.29 | 2.94 | 2.59 | 2.09 |
| TENCHE      | 1959 | 1.56 | 1.22 | 1.43 | 1.85 | 3.13 | 4.75  | 4.91 | 4.28 | 5.58 | 5.57 | 5.48 | 3.04 |
| TENCHE      | 1960 | 2.48 | 2.10 | 1.74 | 3.46 | 3.87 | 5.50  | 4.91 | 5.44 | 7.04 | 5.50 | 4.88 | 5.55 |
| TENCHE      | 1961 | 2.35 | 1.88 | 1.85 | 3.60 | 3.25 | 6.17  | 6.11 | 4.49 | 6.46 | 5.14 | 5.82 | 3.74 |
| TENCHE      | 1962 | 2.60 | 2.20 | 2.49 | 2.65 | 5.76 | 5.17  | 5.10 | 6.00 | 6.64 | 5.30 | 5.12 | 3.46 |
| TENCHE      | 1963 | 2.95 | 3.08 | 3.56 | 4.88 | 5.28 | 4.68  | 7.73 | 5.77 | 5.33 | 5.45 | 5.42 | 3.15 |
| TENCHE      | 1964 | 2.82 | 2.75 | 2.90 | 4.54 | 4.02 | 4.11  | 6.43 | 5.14 | 6.19 | 5.63 | 4.84 | 3.65 |
| TENCHE      | 1965 | 3.12 | 2.74 | 2.91 | 3.51 | 5.07 | 4.28  | 4.02 | 4.70 | 6.10 | 5.40 | 4.93 | 3.61 |
| TENCHE      | 1966 | 2.39 | 1.72 | 2.14 | 2.36 | 3.44 | 5.73  | 4.72 | 5.19 | 5.11 | 5.27 | 4.38 | 5.60 |
| TENCHE      | 1967 | 3.38 | 2.68 | 2.13 | 4.18 | 6.50 | 10.48 | 8.98 | 5.86 | 5.11 | 4.39 | 3.44 | 2.42 |
| TENCHE      | 1968 | 3.17 | 2.59 | 2.37 | 3.19 | 3.80 | 5.40  | 4.80 | 5.77 | 4.64 | 5.75 | 4.47 | 3.43 |
| TENCHE      | 1969 | 1.77 | 2.20 | 1.91 | 4.64 | 4.33 | 2.86  | 2.65 | 6.86 | 5.96 | 6.64 | 6.02 | 3.08 |
| TENCHE      | 1970 | 2.46 | 2.89 | 3.22 | 4.13 | 5.91 | 4.80  | 4.18 | 4.40 | 6.17 | 8.71 | 7.23 | 4.82 |
| TENCHE      | 1971 | 4.52 | 4.36 | 5.10 | 4.76 | 6.13 | 5.69  | 7.69 | 8.74 | 7.33 | 7.43 | 5.23 | 2.55 |
| TENCHE      | 1972 | 3.44 | 2.09 | 2.17 | 3.39 | 8.39 | 7.70  | 5.41 | 6.09 | 5.94 | 5.38 | 4.36 | 3.46 |
| TENCHE      | 1973 | 2.77 | 3.03 | 2.63 | 3.17 | 3.85 | 4.06  | 3.93 | 4.68 | 5.39 | 4.98 | 5.67 | 3.87 |
| TENCHE      | 1974 | 3.44 | 2.80 | 2.88 | 4.01 | 6.13 | 4.44  | 5.09 | 6.54 | 6.65 | 7.00 | 6.73 | 3.37 |
| TENCHE      | 1975 | 2.13 | 3.09 | 2.59 | 2.93 | 4.02 | 6.21  | 6.42 | 8.16 | 8.30 | 8.44 | 7.02 | 5.31 |
| TENCHE      | 1976 | 2.70 | 2.67 | 3.13 | 4.15 | 4.93 | 4.42  | 3.58 | 5.28 | 3.91 | 4.97 | 3.78 | 2.55 |
| TENCHE      | 1977 | 2.15 | 2.53 | 2.02 | 2.36 | 3.31 | 5.52  | 4.42 | 5.83 | 4.33 | 4.24 | 3.31 | 2.23 |
| TENCHE      | 1978 | 2.29 | 2.64 | 2.86 | 4.74 | 3.54 | 5.85  | 5.43 | 4.22 | 4.70 | 4.51 | 4.92 | 4.36 |
| TENCHE      | 1979 | 2.69 | 3.08 | 2.43 | 3.93 | 4.55 | 6.60  | 2.95 | 4.00 | 3.92 | 7.32 | 6.75 | 3.89 |
| TENCHE      | 1980 | 2.85 | 4.58 | 4.01 | 3.68 | 4.59 | 6.13  | 6.10 | 4.96 | 3.60 | 6.27 | 6.14 | 3.86 |

|        |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| TENCHE | 1981 | 3.35 | 4.48 | 4.00 | 5.42 | 8.81 | 7.18 | 7.65 | 5.72 | 6.37 | 5.77 | 4.05 | 3.65 |
| TENCHE | 1982 | 3.42 | 4.48 | 4.20 | 6.00 | 7.26 | 5.72 | 5.39 | 4.56 | 5.19 | 5.83 | 4.24 | 3.90 |
| TENCHE | 1983 | 2.49 | 2.79 | 2.23 | 3.53 | 5.40 | 3.97 | 7.97 | 5.68 | 6.98 | 6.98 | 4.76 | 4.07 |
| TENCHE | 1984 | 3.49 | 3.62 | 2.46 | 3.80 | 3.97 | 5.65 | 4.05 | 5.32 | 8.01 | 6.37 | 6.85 | 4.64 |
| TENCHE | 1985 | 3.52 | 3.63 | 4.34 | 3.48 | 5.44 | 4.19 | 5.58 | 7.32 | 6.74 | 4.67 | 3.36 | 4.09 |
| TENCHE | 1986 | 3.67 | 4.04 | 3.57 | 6.18 | 4.75 | 5.50 | 3.94 | 4.10 | 3.50 | 5.98 | 3.04 | 3.10 |
| TENCHE | 1987 | 2.58 | 2.58 | 2.63 | 4.49 | 5.06 | 4.16 | 5.41 | 4.06 | 5.79 | 6.35 | 4.58 | 3.20 |
| TENCHE | 1988 | 2.82 | 2.97 | 2.12 | 2.91 | 3.48 | 4.36 | 4.09 | 6.19 | 6.63 | 5.36 | 6.08 | 3.95 |
| TENCHE | 1989 | 3.29 | 3.21 | 3.64 | 3.77 | 5.18 | 6.01 | 5.76 | 8.72 | 7.60 | 8.10 | 4.83 | 4.22 |
| TENCHE | 1990 | 2.75 | 2.84 | 3.33 | 3.55 | 6.39 | 5.33 | 5.40 | 4.03 | 3.96 | 7.58 | 5.72 | 4.64 |
| TENCHE | 1991 | 2.77 | 2.76 | 2.69 | 3.00 | 5.31 | 4.81 | 4.94 | 2.81 | 3.33 | 3.74 | 3.82 | 2.75 |
| TENCHE | 1992 | 1.75 | 1.77 | 1.28 | 1.78 | 3.14 | 2.05 | 2.14 | 3.16 | 4.85 | 2.96 | 2.56 | 2.68 |
| TENCHE | 1993 | 2.18 | 2.23 | 2.10 | 2.88 | 4.32 | 3.41 | 4.68 | 4.65 | 6.08 | 5.16 | 4.67 | 4.27 |
| TENCHE | 1994 | 2.44 | 2.82 | 3.36 | 4.60 | 4.84 | 6.91 | 4.35 | 9.53 | 7.87 | 6.60 | 6.84 | 3.21 |
| TENCHE | 1995 | 2.43 | 2.94 | 3.18 | 3.80 | 3.76 | 4.94 | 5.50 | 5.04 | 4.42 | 5.36 | 3.37 | 3.74 |
| TENCHE | 1996 | 2.68 | 3.25 | 3.98 | 4.60 | 7.24 | 6.52 | 8.07 | 6.32 | 5.47 | 6.10 | 4.94 | 2.79 |
| TENCHE | 1997 | 2.29 | 3.43 | 3.43 | 4.35 | 3.19 | 4.06 | 2.54 | 1.80 | 3.35 | 2.21 | 3.07 | 1.98 |
| TENCHE | 1998 | 1.66 | 2.55 | 1.59 | 4.74 | 4.08 | 6.66 | 7.66 | 5.07 | 5.67 | 4.27 | 3.63 | 4.35 |
| TENCHE | 1999 | 2.96 | 3.85 | 3.41 | 6.06 | 7.40 | 8.02 | 7.76 | 5.72 | 5.85 | 5.97 | 5.90 | 3.71 |
| TENCHE | 2000 | 2.36 | 2.53 | 2.69 | 2.94 | 5.05 | 6.44 | 7.04 | 6.95 | 6.53 | 5.31 | 3.61 | 3.45 |
| TENCHE | 2001 | 1.96 | 3.03 | 3.04 | 3.63 | 6.04 | 8.64 | 5.54 | 3.86 | 6.91 | 4.28 | 6.03 | 4.74 |
| TENCHE | 2002 | 2.13 | 2.05 | 3.14 | 4.47 | 4.64 | 5.02 | 2.67 | 2.72 | 3.13 | 2.87 | 2.49 | 3.01 |
| TENCHE | 2003 | 1.28 | 2.89 | 2.75 | 3.96 | 6.38 | 5.56 | 3.96 | 4.03 | 4.03 | 6.51 | 4.37 | 5.49 |
| TENCHE | 2004 | 2.92 | 2.31 | 2.37 | 4.44 | 4.99 | 3.83 | 5.63 | 4.01 | 4.45 | 3.79 | 5.58 | 2.36 |
| TENCHE | 2005 | 1.70 | 3.08 | 2.68 | 4.40 | 4.45 | 5.89 | 4.14 | 3.36 | 4.04 | 4.72 | 6.07 | 2.85 |
| TENCHE | 2006 | 1.87 | 2.82 | 4.01 | 5.33 | 8.16 | 6.17 | 4.37 | 5.24 | 5.84 | 4.95 | 6.09 | 3.87 |
| TENCHE | 2007 | 3.13 | 3.32 | 3.13 | 4.67 | 7.40 | 5.54 | 5.94 | 7.34 | 6.72 | 7.81 | 6.48 | 3.53 |
| TENCHE | 2008 | 2.98 | 3.91 | 3.32 | 3.39 | 4.04 | 5.91 | 8.58 | 5.10 | 7.06 | 7.17 | 5.80 | 3.98 |

## Formato 5. Embalses

| Nombre     | Mínimo Técnico (Mm3) | Máximo Técnico (Mm3) |
|------------|----------------------|----------------------|
| MIRAFLORES | 5.55                 | 99.09                |
| PENOL      | 70.28                | 1,070.21             |
| PLAYAS     | 19.43                | 69.08                |
| PORCE2     | 53.19                | 149.37               |
| QUEBRADONA | 1.33                 | 1.87                 |
| RIOGRANDE2 | 48.40                | 187.36               |
| TRONERAS   | 9.53                 | 31.36                |

**Formato 6. Filtraciones**  
Formato No Registrado

**Formato 7. Curvas de Operación Embalses**

| Embalse    | Mes | Volumen Espera (Mm3) | Curva Guía Mínima (Mm3) | Curva Guía Máxima (Mm3) |
|------------|-----|----------------------|-------------------------|-------------------------|
| RIOGRANDE2 | 1   |                      | 48.40                   |                         |
| RIOGRANDE2 | 2   |                      | 48.40                   |                         |
| RIOGRANDE2 | 3   |                      | 48.40                   |                         |
| RIOGRANDE2 | 4   |                      | 48.40                   |                         |
| RIOGRANDE2 | 5   |                      | 48.40                   |                         |
| RIOGRANDE2 | 6   |                      | 48.40                   |                         |
| RIOGRANDE2 | 7   |                      | 48.40                   |                         |
| RIOGRANDE2 | 8   |                      | 48.40                   |                         |
| RIOGRANDE2 | 9   |                      | 48.40                   |                         |
| RIOGRANDE2 | 10  |                      | 48.40                   |                         |
| RIOGRANDE2 | 11  |                      | 48.40                   |                         |
| RIOGRANDE2 | 12  |                      | 48.40                   |                         |

**Formato 8. Capacidad Arcos de Descarga**

| Nombre             | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) | Fecha Entrada | Fecha Salida |
|--------------------|---------------------|---------------------|---------------|--------------|
| Canal Quebradona   | 0.00                | 31.00               | 1950-12-01    | 2100-12-01   |
| Dolores-Concepcion | 0.00                | 16.00               | 1990-12-01    | 2100-12-01   |
| Miraflores-Tenche  | 0.00                | 23.60               | 1967-07-01    | 2100-12-01   |
| Nechi-Pajarito     | 0.00                | 5.50                | 1990-12-01    | 2100-12-01   |
| Pajarito-Dolores   | 0.00                | 10.00               | 1990-12-01    | 2100-12-01   |
| Tenche-Troneras    | 0.00                | 23.30               | 1967-07-01    | 2100-12-01   |
| Troneras-Guadalupe | 0.00                | 43.00               | 1967-07-01    | 2100-12-01   |
| Valvula Riogrande2 | 0.00                | 52.77               | 1996-04-01    | 2100-12-01   |

**Formato 9. Arco de Bombeo**  
Formato No Registrado

**Formato 10. Capacidad Máxima Arco Generación**

| Nombre     | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) |
|------------|---------------------|---------------------|
| GUADALUPE3 | 0.00                | 60.00               |
| GUADALUPE4 | 0.00                | 60.00               |
| GUATAPE    | 0.00                | 84.00               |
| LATASAJERA | 0.00                | 39.80               |
| PLAYAS     | 0.00                | 130.00              |
| PORCE2     | 0.00                | 203.10              |
| RIOGRANDE1 | 0.00                | 31.00               |
| TRONERAS   | 0.00                | 65.00               |

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego

| Nombre | Año T (m3/s) | Año T+1 (m3/s) | Año T+2 (m3/s) | Año T+3 (m3/s) | Año T+4 (m3/s) | Año T+5 (m3/s) | Factor Recuperación |
|--------|--------------|----------------|----------------|----------------|----------------|----------------|---------------------|
| GRANDE |              |                |                |                | 4.32           |                | 85                  |
| NARE   |              |                |                |                | 5.45           |                | 85                  |

**Formato 14.** Suministro Gas Natural

| Planta          | Campo   | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-----------------|---------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TERMOSIERRA GAS | Guajira | 398.95          | 108,500.00               | 108,500.00           | 98,000.00              | 108,500.00           | 105,000.00           | 108,500.00          | 105,000.00           | 108,500.00           | 108,500.00            | 105,000.00                | 108,500.00             | 105,000.00               |

**Formato 15.** Transporte Gas Natural

| Planta | Punto Entrada | Punto Salida | Transporte Diciembre (MBTU) | Transporte Enero (MBTU) | Transporte Febrero (MBTU) | Transporte Marzo (MBTU) | Transporte Abril (MBTU) | Transporte Mayo (MBTU) | Transporte Junio (MBTU) | Transporte Julio (MBTU) | Transporte Agosto (MBTU) | Transporte Septiembre (MBTU) | Transporte Octubre (MBTU) | Transporte Noviembre (MBTU) |
|--------|---------------|--------------|-----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|
|--------|---------------|--------------|-----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|

|                 |                                                                                         |                                                                                                                                              |            |            |           |            |            |            |            |            |            |            |            |            |
|-----------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| TERMOSIERRA GAS | Ballena<br>Brida salida<br>ubicada en<br>medidor<br>estación<br>Ballena en<br>Centragas | Nare<br>Corregimient<br>o La Sierra<br>brida salida<br>conexion<br>gasoducto<br>troncal con<br>ramal que<br>conecta<br>instalacion<br>de EPM | 108,500.00 | 108,500.00 | 98,000.00 | 108,500.00 | 105,000.00 | 108,500.00 | 105,000.00 | 108,500.00 | 108,500.00 | 105,000.00 | 108,500.00 | 105,000.00 |
|-----------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|

#### Formato 16. Suministro Combustible Diferente a Gas

| Planta           | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|------------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TERMOSIERRA ACPM | ACPM        | 8,361.05        | 1,954,055.49             | 1,954,055.49         | 1,764,953.34           | 1,954,055.49         | 1,891,021.44         | 1,954,055.49        | 1,891,021.44         | 1,954,055.49         | 1,954,055.49          | 1,891,021.44              | 1,954,055.49           | 1,891,021.44             |

#### Formato 17. Almacenamiento Combustible

Formato No Registrado

#### Formato 18. Energía Contratada

Formato No Registrado

#### Formato 19. Plantas Menores

| Nombre        | Capacidad Efectiva Neta (MW) | Disponibilidad (%) |
|---------------|------------------------------|--------------------|
| AMALFI        | 0.81                         | 35.00              |
| AMERICA       | 0.41                         | 21.78              |
| AUX.RIOGRANDE | 0.30                         | 35.00              |
| AYURA         | 18.00                        | 35.00              |
| BELLO         | 0.35                         | 35.00              |
| CAMPESTRE     | 0.87                         | 35.00              |
| CEMENTOS NARE | 4.50                         | 35.00              |
| COLTEJER      | 1.60                         | 0.00               |
| DOLORES       | 8.30                         | 35.00              |
| JEPİRACHI     | 18.42                        | 7.44               |
| LA HERRADURA  | 19.80                        | 35.00              |
| LA VUELTA     | 11.60                        | 35.00              |
| MANANTIALES   | 3.15                         | 35.00              |

|                        |       |       |
|------------------------|-------|-------|
| NIQUIA                 | 19.00 | 35.00 |
| NUTIBARA               | 0.75  | 35.00 |
| PAJARITO               | 4.90  | 35.00 |
| PIEDRAS BLANCAS        | 5.00  | 35.00 |
| PROVIDENCIA            | 3.00  | 0.00  |
| REMEDIOS               | 0.75  | 35.00 |
| RIO ABAJO              | 0.90  | 35.00 |
| RIOGRANDE1             | 19.00 | 3.47  |
| SAN JOSE DE LA MONTANA | 0.40  | 35.00 |
| SONSON                 | 18.50 | 35.00 |
| TAMESIS                | 1.20  | 35.00 |

Generadora Y Comercializadora De Energía Del Caribe S.A. E.S.P.

**Formato 1.** Plantas o Unidades Hidráulicas

Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas

Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre         | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|----------------|------------------------------|-----------------------|---------|
| BARRANQUILLA 3 | 60.00                        | 11.8000               | 22.7961 |
| BARRANQUILLA 4 | 60.00                        | 11.8000               | 20.0000 |
| GUAJIRA 1      | 145.00                       | 9.5000                | 16.9544 |
| GUAJIRA 2      | 145.00                       | 13.2000               | 20.0000 |
| TEBSA          | 750.00                       | 8.5000                | 6.0323  |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11. Descarga Máxima Embalse Bogotá**  
Formato No Registrado

**Formato 12. Capacidad Túneles Chivor**  
Formato No Registrado

**Formato 13. Demanda Acueducto y Riego**  
Formato No Registrado

**Formato 14. Suministro Gas Natural**

| Planta | Campo                           | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|--------|---------------------------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TEBSA  | Guajira y/o La Creciente u otro | 8,760.00        | 331,913.28               | 331,913.28           | 299,792.64             | 331,913.28           | 321,206.40           | 331,913.28          | 321,206.40           | 331,913.28           | 331,913.28            | 321,206.40                | 331,913.28             | 321,206.40               |

**Formato 15. Transporte Gas Natural**

| Planta | Punto Entrada                    | Punto Salida | Transporte Diciembre (MBTU) | Transporte Enero (MBTU) | Transporte Febrero (MBTU) | Transporte Marzo (MBTU) | Transporte Abril (MBTU) | Transporte Mayo (MBTU) | Transporte Junio (MBTU) | Transporte Julio (MBTU) | Transporte Agosto (MBTU) | Transporte Septiembre (MBTU) | Transporte Octubre (MBTU) | Transporte Noviembre (MBTU) |
|--------|----------------------------------|--------------|-----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|
| TEBSA  | Ballenas y/o La Creciente u otro | Tebesa       | 331,913.28                  | 331,913.28              | 299,792.64                | 331,913.28              | 321,206.40              | 331,913.28             | 321,206.40              | 331,913.28              | 331,913.28               | 321,206.40                   | 331,913.28                | 321,206.40                  |

**Formato 16. Suministro Combustible Diferente a Gas**

| Planta         | Combustible    | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|----------------|----------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| BARRANQUILLA 3 | FUEL OIL No. 6 | 8,760.00        | 406,674.00               | 406,674.00           | 367,318.00             | 406,674.00           | 393,555.00           | 406,674.00          | 393,555.00           | 406,674.00           | 406,674.00            | 393,555.00                | 406,674.00             | 393,555.00               |
| BARRANQUILLA 4 | FUEL OIL No. 6 | 8,760.00        | 421,402.00               | 421,402.00           | 380,621.00             | 421,402.00           | 407,808.00           | 421,402.00          | 407,808.00           | 421,402.00           | 421,402.00            | 407,808.00                | 421,402.00             | 407,808.00               |
| GUAJIRA 1      | CARBON         | 8,760.00        | 909,453.00               | 909,453.00           | 821,441.00             | 909,453.00           | 880,116.00           | 909,453.00          | 880,116.00           | 909,453.00           | 909,453.00            | 880,116.00                | 909,453.00             | 880,116.00               |
| GUAJIRA 2      | CARBON         | 8,760.00        | 1,139,213.00             | 1,139,213.00         | 1,028,967.00           | 1,139,213.00         | 1,102,464.00         | 1,139,213.00        | 1,102,464.00         | 1,139,213.00         | 1,139,213.00          | 1,102,464.00              | 1,139,213.00           | 1,102,464.00             |
| TEBSA          | FUEL OIL No. 2 | 8,760.00        | 4,503,976.05             | 4,503,976.05         | 4,068,107.40           | 4,503,976.05         | 4,358,686.50         | 4,503,976.05        | 4,358,686.50         | 4,503,976.05         | 4,503,976.05          | 4,358,686.50              | 4,503,976.05           | 4,358,686.50             |

**Formato 17. Almacenamiento Combustible**

| Planta         | Combustible    | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|----------------|----------------|--------------------------|----------------------------|
| BARRANQUILLA 3 | FUEL OIL No. 6 | 999,390.00               | 0.00                       |
| BARRANQUILLA 4 | FUEL OIL No. 6 | 999,390.00               | 0.00                       |
| GUAJIRA 1      | CARBON         | 135,000.00               | 0.00                       |
| GUAJIRA 2      | CARBON         | 135,000.00               | 0.00                       |
| TEBSA          | FUEL OIL No. 2 | 1,998,780.00             | 0.00                       |

**Formato 18. Energía Contratada**

| Planta         | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| BARRANQUILLA 3 | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |
| BARRANQUILLA 4 | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |
| GUAJIRA 1      | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |
| GUAJIRA 2      | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |
| TEBSA          | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |

**Formato 19. Plantas Menores**

Formato No Registrado

Isagen S.A. E.S.P.

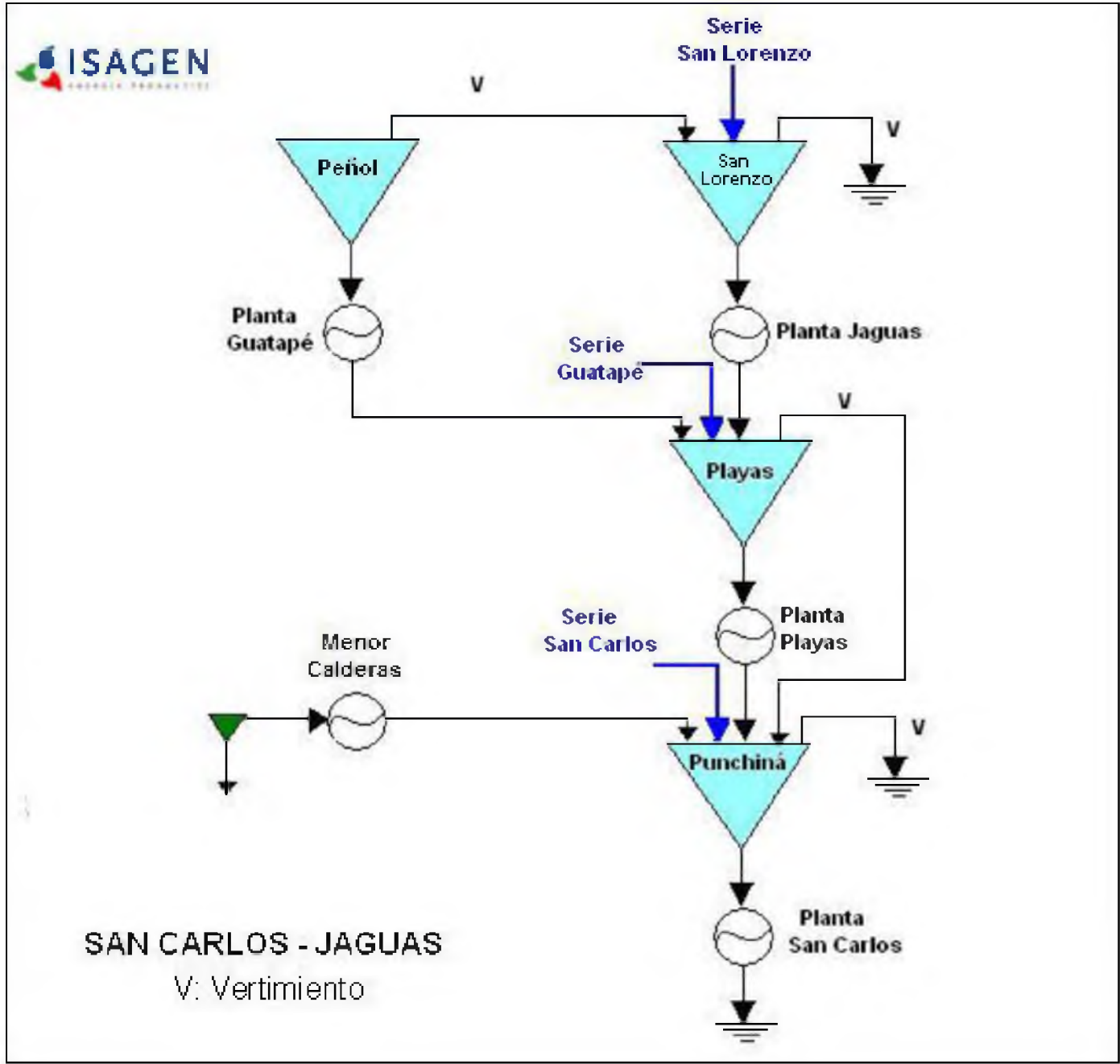
Formato 1. Plantas o Unidades Hidráulicas

| Nombre     | Capacidad Efectiva Neta (MW) | Eficiencia (MW/m3/s) | IHF (%) |
|------------|------------------------------|----------------------|---------|
| Jaguas     | 170.00                       | 2.5684               | 1.1013  |
| San Carlos | 1,240.00                     | 5.4844               | 5.4166  |

Formato 2. Topología Plantas Hidráulicas

| Nombre Sistema | Elemento Clase | Elemento Nombre | Aportes Rio                     | Aportes Embalse       | Aportes Planta | Aportes Otro | Descargas Rio | Descargas Embalse | Descargas Planta | Descargas Otro | Vertimiento s Rio | Vertimiento s Embalse | Vertimiento s Planta | Vertimiento s Otro |
|----------------|----------------|-----------------|---------------------------------|-----------------------|----------------|--------------|---------------|-------------------|------------------|----------------|-------------------|-----------------------|----------------------|--------------------|
| Jaguas         | E              | San Lorenzo     | Serie San Lorenzo               | Vertimiento del Penol |                |              |               |                   | Jaguas           |                |                   |                       |                      | Tierra             |
| Jaguas         | P              | Jaguas          |                                 | San Lorenzo           |                |              |               | Playas            |                  |                |                   |                       |                      |                    |
| San Carlos     | E              | Punchina        | Serie San Carlos+Menor Calderas | Vertimiento de Playas | Playas         |              |               |                   | San Carlos       |                |                   |                       |                      | Tierra             |
| San Carlos     | P              | San Carlos      |                                 | Punchina              |                |              | Tierra        |                   |                  |                |                   |                       |                      |                    |

Formato 2a. Diagramas Topología



### Formato 3. Plantas o Unidades Térmicas

| Nombre                      | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|-----------------------------|------------------------------|-----------------------|---------|
| Termocentro Ciclo Combinado | 275.58                       | 8.4369                | 2.2334  |

#### Formato 4. Caudal Medio Mensual

[illegible]

[illegible]

|                  |      |       |       |       |       |       |       |       |       |       |       |       |       |
|------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie San Carlos | 1965 | 16.24 | 14.85 | 12.03 | 12.65 | 27.74 | 16.06 | 11.41 | 14.81 | 32.70 | 40.10 | 46.67 | 26.15 |
| Serie San Carlos | 1966 | 23.91 | 13.75 | 16.44 | 18.33 | 24.17 | 26.68 | 18.62 | 20.03 | 19.81 | 32.46 | 38.12 | 32.72 |
| Serie San Carlos | 1967 | 23.18 | 14.10 | 13.97 | 33.47 | 27.12 | 27.72 | 24.57 | 21.33 | 23.07 | 30.78 | 28.49 | 18.64 |
| Serie San Carlos | 1968 | 13.59 | 10.22 | 11.48 | 24.17 | 24.59 | 22.41 | 28.36 | 27.72 | 45.19 | 43.83 | 36.91 | 20.65 |
| Serie San Carlos | 1969 | 17.76 | 12.47 | 12.25 | 26.02 | 27.65 | 19.21 | 11.04 | 21.97 | 37.06 | 48.10 | 39.95 | 23.40 |
| Serie San Carlos | 1970 | 17.61 | 10.99 | 10.27 | 16.17 | 35.45 | 21.86 | 30.74 | 26.90 | 38.27 | 54.97 | 40.52 | 25.80 |
| Serie San Carlos | 1971 | 25.69 | 18.42 | 32.02 | 28.80 | 79.76 | 30.10 | 26.00 | 32.19 | 38.10 | 42.68 | 36.11 | 23.55 |
| Serie San Carlos | 1972 | 26.64 | 14.50 | 15.84 | 23.82 | 30.74 | 29.79 | 18.11 | 23.40 | 18.13 | 28.01 | 29.77 | 24.46 |
| Serie San Carlos | 1973 | 16.81 | 9.81  | 9.30  | 23.05 | 19.65 | 26.66 | 19.37 | 30.01 | 41.14 | 36.31 | 48.47 | 35.28 |
| Serie San Carlos | 1974 | 28.93 | 19.63 | 17.89 | 30.30 | 38.30 | 30.78 | 22.63 | 27.52 | 39.18 | 41.82 | 41.34 | 19.74 |
| Serie San Carlos | 1975 | 13.07 | 11.11 | 13.20 | 23.16 | 30.96 | 30.98 | 32.79 | 27.85 | 36.55 | 43.27 | 46.47 | 35.25 |
| Serie San Carlos | 1976 | 19.24 | 16.33 | 26.29 | 36.40 | 24.52 | 19.70 | 11.19 | 11.92 | 19.37 | 42.66 | 40.56 | 18.27 |
| Serie San Carlos | 1977 | 11.17 | 9.81  | 11.48 | 13.22 | 22.87 | 23.80 | 25.80 | 25.23 | 31.60 | 35.83 | 36.49 | 26.46 |
| Serie San Carlos | 1978 | 13.20 | 12.49 | 15.05 | 28.09 | 27.10 | 20.58 | 24.88 | 14.72 | 29.06 | 27.56 | 38.63 | 21.33 |
| Serie San Carlos | 1979 | 11.15 | 10.09 | 12.34 | 26.86 | 32.24 | 24.52 | 17.43 | 22.63 | 32.76 | 39.24 | 36.51 | 18.95 |
| Serie San Carlos | 1980 | 16.83 | 11.35 | 11.74 | 24.66 | 22.30 | 21.90 | 17.21 | 16.64 | 23.40 | 39.62 | 42.17 | 28.89 |
| Serie San Carlos | 1981 | 15.73 | 14.83 | 11.61 | 29.88 | 42.15 | 34.24 | 26.00 | 29.08 | 30.87 | 45.54 | 41.25 | 29.66 |
| Serie San Carlos | 1982 | 14.37 | 19.32 | 25.36 | 35.21 | 40.70 | 20.12 | 10.49 | 9.52  | 17.54 | 34.06 | 20.49 | 32.10 |
| Serie San Carlos | 1983 | 10.22 | 10.29 | 9.10  | 35.01 | 25.49 | 15.56 | 18.22 | 15.49 | 28.62 | 43.45 | 32.59 | 32.10 |
| Serie San Carlos | 1984 | 17.83 | 26.44 | 16.70 | 24.92 | 35.74 | 43.05 | 33.91 | 27.92 | 36.16 | 45.54 | 58.39 | 33.23 |
| Serie San Carlos | 1985 | 15.49 | 11.39 | 19.13 | 26.15 | 38.01 | 18.55 | 14.23 | 23.22 | 27.59 | 27.30 | 20.21 | 20.45 |
| Serie San Carlos | 1986 | 18.09 | 14.56 | 11.68 | 37.99 | 29.11 | 25.41 | 14.52 | 24.94 | 26.15 | 39.31 | 38.25 | 22.14 |
| Serie San Carlos | 1987 | 17.91 | 14.37 | 17.58 | 27.17 | 36.86 | 26.75 | 28.49 | 23.16 | 38.12 | 51.16 | 48.65 | 29.72 |
| Serie San Carlos | 1988 | 12.56 | 18.00 | 13.77 | 44.07 | 52.33 | 35.83 | 67.34 | 44.11 | 64.89 | 68.90 | 74.08 | 62.91 |
| Serie San Carlos | 1989 | 47.48 | 23.95 | 33.98 | 43.27 | 43.72 | 40.19 | 18.71 | 39.00 | 35.94 | 54.62 | 49.73 | 26.57 |
| Serie San Carlos | 1990 | 20.67 | 25.78 | 18.42 | 41.38 | 34.40 | 36.29 | 33.32 | 34.95 | 46.23 | 45.54 | 42.53 | 32.10 |
| Serie San Carlos | 1991 | 12.10 | 10.50 | 14.10 | 26.00 | 26.90 | 22.20 | 18.90 | 16.00 | 14.56 | 30.03 | 31.53 | 25.10 |

|                   |      |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie San Carlos  | 1992 | 14.26 | 11.63 | 19.74 | 20.38 | 36.82 | 28.12 | 16.59 | 27.63 | 39.60 | 41.42 | 40.15 | 42.39 |
| Serie San Carlos  | 1993 | 35.28 | 24.22 | 29.00 | 40.26 | 44.57 | 21.75 | 31.27 | 23.66 | 51.52 | 30.91 | 28.16 | 37.88 |
| Serie San Carlos  | 1994 | 19.46 | 16.55 | 18.57 | 41.40 | 37.08 | 19.15 | 20.45 | 22.72 | 22.43 | 35.98 | 28.86 | 19.61 |
| Serie San Carlos  | 1995 | 11.83 | 10.05 | 20.67 | 29.90 | 28.60 | 29.68 | 26.77 | 53.26 | 31.82 | 51.56 | 38.32 | 19.15 |
| Serie San Carlos  | 1996 | 15.18 | 19.13 | 21.84 | 34.88 | 35.10 | 29.06 | 25.89 | 22.87 | 19.37 | 47.09 | 38.58 | 13.97 |
| Serie San Carlos  | 1997 | 7.51  | 13.48 | 22.94 | 46.59 | 29.75 | 36.76 | 12.97 | 16.37 | 32.91 | 28.31 | 31.55 | 16.30 |
| Serie San Carlos  | 1998 | 15.84 | 17.87 | 14.87 | 21.58 | 37.20 | 16.66 | 30.53 | 29.01 | 44.65 | 49.95 | 57.40 | 48.75 |
| Serie San Carlos  | 1999 | 39.09 | 34.28 | 26.00 | 39.72 | 34.70 | 26.17 | 18.46 | 19.60 | 31.24 | 38.67 | 28.50 | 25.05 |
| Serie San Carlos  | 2000 | 9.14  | 14.89 | 13.07 | 17.53 | 24.24 | 37.45 | 20.27 | 22.68 | 47.32 | 37.61 | 30.75 | 26.97 |
| Serie San Carlos  | 2001 | 10.23 | 7.50  | 13.57 | 12.21 | 26.98 | 12.58 | 24.01 | 7.89  | 18.87 | 32.65 | 24.90 | 21.02 |
| Serie San Carlos  | 2002 | 11.11 | 8.25  | 11.76 | 33.32 | 18.12 | 26.11 | 8.48  | 13.83 | 24.74 | 27.59 | 18.58 | 11.56 |
| Serie San Carlos  | 2003 | 6.29  | 7.52  | 9.47  | 24.62 | 25.92 | 31.72 | 16.37 | 16.73 | 18.58 | 27.05 | 21.35 | 31.00 |
| Serie San Carlos  | 2004 | 16.30 | 13.53 | 15.68 | 26.75 | 32.19 | 18.92 | 25.42 | 17.42 | 39.05 | 30.05 | 59.00 | 22.65 |
| Serie San Carlos  | 2005 | 15.75 | 13.66 | 11.80 | 18.19 | 35.22 | 41.29 | 19.59 | 18.08 | 19.44 | 39.41 | 65.43 | 19.12 |
| Serie San Carlos  | 2006 | 17.03 | 21.01 | 27.95 | 31.55 | 29.30 | 23.12 | 12.34 | 24.19 | 18.96 | 65.19 | 59.16 | 25.77 |
| Serie San Carlos  | 2007 | 21.89 | 17.72 | 20.16 | 26.46 | 58.11 | 25.42 | 33.69 | 46.12 | 54.88 | 81.69 | 31.96 | 20.08 |
| Serie San Carlos  | 2008 | 13.99 | 18.23 | 26.53 | 26.80 | 45.45 | 26.24 | 33.31 | 43.68 | 19.06 | 40.38 | 46.40 | 16.52 |
| Serie San Lorenzo | 1955 |       |       |       |       |       |       |       | 38.23 | 46.40 | 60.28 | 66.91 | 53.21 |
| Serie San Lorenzo | 1956 | 50.50 | 44.41 | 41.43 | 38.99 | 65.95 | 56.60 | 42.29 | 46.45 | 50.48 | 68.05 | 60.68 | 46.22 |
| Serie San Lorenzo | 1957 | 31.17 | 26.57 | 21.93 | 37.01 | 45.44 | 37.47 | 31.45 | 33.04 | 33.62 | 39.73 | 35.80 | 30.64 |
| Serie San Lorenzo | 1958 | 20.61 | 19.23 | 23.97 | 25.74 | 37.89 | 24.89 | 21.15 | 35.29 | 25.05 | 33.25 | 30.72 | 28.40 |
| Serie San Lorenzo | 1959 | 19.08 | 16.94 | 18.32 | 22.97 | 31.58 | 32.25 | 27.80 | 30.64 | 46.73 | 40.92 | 40.53 | 26.28 |
| Serie San Lorenzo | 1960 | 22.15 | 20.62 | 23.80 | 27.64 | 37.22 | 41.35 | 43.63 | 33.55 | 46.69 | 43.67 | 45.61 | 43.12 |
| Serie San Lorenzo | 1961 | 26.05 | 24.97 | 24.29 | 28.44 | 34.24 | 39.59 | 37.08 | 34.86 | 56.54 | 55.12 | 60.52 | 39.03 |
| Serie San Lorenzo | 1962 | 25.18 | 22.39 | 30.94 | 37.09 | 65.02 | 64.34 | 41.83 | 44.82 | 46.12 | 61.38 | 52.31 | 35.24 |
| Serie San Lorenzo | 1963 | 26.69 | 34.14 | 36.27 | 46.21 | 48.39 | 34.97 | 37.07 | 37.47 | 40.16 | 48.53 | 58.47 | 31.32 |
| Serie San Lorenzo | 1964 | 23.90 | 19.77 | 19.65 | 33.91 | 66.65 | 35.31 | 43.43 | 41.21 | 56.85 | 51.43 | 45.71 | 28.14 |

|                   |      |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Serie San Lorenzo | 1965 | 29.50 | 22.20 | 20.20 | 27.90 | 47.20 | 38.00 | 28.70 | 41.80 | 54.50 | 48.00 | 58.70 | 33.80 |
| Serie San Lorenzo | 1966 | 34.70 | 21.60 | 27.00 | 30.00 | 40.10 | 54.80 | 35.60 | 43.80 | 41.00 | 48.00 | 53.10 | 39.40 |
| Serie San Lorenzo | 1967 | 31.50 | 25.30 | 26.30 | 47.30 | 56.10 | 57.00 | 54.50 | 34.30 | 54.10 | 42.80 | 35.70 | 26.88 |
| Serie San Lorenzo | 1968 | 22.10 | 15.20 | 19.30 | 32.40 | 34.90 | 42.60 | 46.60 | 47.30 | 64.50 | 60.10 | 46.80 | 27.00 |
| Serie San Lorenzo | 1969 | 27.40 | 23.50 | 23.40 | 32.20 | 35.40 | 32.80 | 19.40 | 48.90 | 56.80 | 53.90 | 50.20 | 32.70 |
| Serie San Lorenzo | 1970 | 30.60 | 15.70 | 22.90 | 31.40 | 57.60 | 48.30 | 48.90 | 45.20 | 65.50 | 65.20 | 46.50 | 43.10 |
| Serie San Lorenzo | 1971 | 44.70 | 40.70 | 60.20 | 51.30 | 66.10 | 58.30 | 45.30 | 63.70 | 69.80 | 80.90 | 72.20 | 38.80 |
| Serie San Lorenzo | 1972 | 42.30 | 23.50 | 28.50 | 32.90 | 60.10 | 51.70 | 41.80 | 47.70 | 39.30 | 48.20 | 45.50 | 27.30 |
| Serie San Lorenzo | 1973 | 20.50 | 14.20 | 19.60 | 24.60 | 34.50 | 54.70 | 38.40 | 54.70 | 92.40 | 64.60 | 60.70 | 40.30 |
| Serie San Lorenzo | 1974 | 39.70 | 26.60 | 25.90 | 45.10 | 57.80 | 43.20 | 45.70 | 50.90 | 69.00 | 65.20 | 53.40 | 27.10 |
| Serie San Lorenzo | 1975 | 27.30 | 24.40 | 32.30 | 44.20 | 58.40 | 53.30 | 63.60 | 52.50 | 54.00 | 60.20 | 47.10 | 36.30 |
| Serie San Lorenzo | 1976 | 20.30 | 20.80 | 40.10 | 41.80 | 46.60 | 30.80 | 21.90 | 24.90 | 22.10 | 32.10 | 37.30 | 22.20 |
| Serie San Lorenzo | 1977 | 17.40 | 15.70 | 16.57 | 18.51 | 29.49 | 25.35 | 31.90 | 35.47 | 21.55 | 32.17 | 25.11 | 23.11 |
| Serie San Lorenzo | 1978 | 14.65 | 16.91 | 17.59 | 45.06 | 41.64 | 44.82 | 46.56 | 33.93 | 45.50 | 44.74 | 42.47 | 38.30 |
| Serie San Lorenzo | 1979 | 30.68 | 25.58 | 28.48 | 36.13 | 42.88 | 44.65 | 31.54 | 43.33 | 52.82 | 59.49 | 51.64 | 26.06 |
| Serie San Lorenzo | 1980 | 19.17 | 16.83 | 19.87 | 22.98 | 45.38 | 36.39 | 35.42 | 35.21 | 40.96 | 57.57 | 48.20 | 28.76 |
| Serie San Lorenzo | 1981 | 16.80 | 17.84 | 16.61 | 37.72 | 58.47 | 38.86 | 35.68 | 30.28 | 39.86 | 48.02 | 34.14 | 25.17 |
| Serie San Lorenzo | 1982 | 20.50 | 24.92 | 28.67 | 54.17 | 55.33 | 25.42 | 25.58 | 36.36 | 60.99 | 46.12 | 23.97 | 19.44 |
| Serie San Lorenzo | 1983 | 16.93 | 14.41 | 16.36 | 41.15 | 46.44 | 29.25 | 35.93 | 31.05 | 53.35 | 45.78 | 31.40 | 27.56 |
| Serie San Lorenzo | 1984 | 20.73 | 36.04 | 16.49 | 38.13 | 54.83 | 57.48 | 38.50 | 40.07 | 61.27 | 66.97 | 56.68 | 35.75 |
| Serie San Lorenzo | 1985 | 17.41 | 19.20 | 29.62 | 25.13 | 50.46 | 22.98 | 25.72 | 61.13 | 54.44 | 35.55 | 26.42 | 22.09 |
| Serie San Lorenzo | 1986 | 25.85 | 28.03 | 19.31 | 53.08 | 41.73 | 34.04 | 23.26 | 40.93 | 36.93 | 58.88 | 37.27 | 21.97 |
| Serie San Lorenzo | 1987 | 19.61 | 16.36 | 11.90 | 19.10 | 21.40 | 18.00 | 23.60 | 21.50 | 31.40 | 34.30 | 29.80 | 21.70 |
| Serie San Lorenzo | 1988 | 14.70 | 14.70 | 12.10 | 29.60 | 42.20 | 51.20 | 33.30 | 60.70 | 82.60 | 46.50 | 61.20 | 51.90 |
| Serie San Lorenzo | 1989 | 49.80 | 24.70 | 21.80 | 31.00 | 33.80 | 40.30 | 26.10 | 41.00 | 63.80 | 61.70 | 57.30 | 31.10 |
| Serie San Lorenzo | 1990 | 22.90 | 18.70 | 16.80 | 23.80 | 40.40 | 31.90 | 32.60 | 25.40 | 48.00 | 63.20 | 43.40 | 37.00 |
| Serie San Lorenzo | 1991 | 17.20 | 14.90 | 16.80 | 19.80 | 24.00 | 33.40 | 25.60 | 19.00 | 20.50 | 27.20 | 29.40 | 17.10 |

|                   |      |       |       |       |       |       |       |        |       |       |       |       |       |
|-------------------|------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| Serie San Lorenzo | 1992 | 10.30 | 9.60  | 14.80 | 13.90 | 29.60 | 22.00 | 23.00  | 31.40 | 45.50 | 30.10 | 23.30 | 22.20 |
| Serie San Lorenzo | 1993 | 21.62 | 14.59 | 23.98 | 26.20 | 29.47 | 17.54 | 30.25  | 37.66 | 56.34 | 51.43 | 43.12 | 32.75 |
| Serie San Lorenzo | 1994 | 20.26 | 17.91 | 16.45 | 32.30 | 37.25 | 26.85 | 29.88  | 33.50 | 42.35 | 49.41 | 56.19 | 25.98 |
| Serie San Lorenzo | 1995 | 19.87 | 14.90 | 21.80 | 40.71 | 41.83 | 59.60 | 52.84  | 47.44 | 45.86 | 35.15 | 29.80 | 22.98 |
| Serie San Lorenzo | 1996 | 17.20 | 22.76 | 31.30 | 34.60 | 46.87 | 44.41 | 108.60 | 77.25 | 58.52 | 82.30 | 47.04 | 25.43 |
| Serie San Lorenzo | 1997 | 18.64 | 35.47 | 31.66 | 41.43 | 23.20 | 40.62 | 17.60  | 17.94 | 25.41 | 20.84 | 25.23 | 12.94 |
| Serie San Lorenzo | 1998 | 11.06 | 11.76 | 11.49 | 20.78 | 31.84 | 31.42 | 48.73  | 36.61 | 60.73 | 50.09 | 41.63 | 40.18 |
| Serie San Lorenzo | 1999 | 26.40 | 34.30 | 27.91 | 38.82 | 46.29 | 51.72 | 38.40  | 34.92 | 50.80 | 54.21 | 43.03 | 35.46 |
| Serie San Lorenzo | 2000 | 18.81 | 20.94 | 21.16 | 29.01 | 61.56 | 69.07 | 64.74  | 64.76 | 77.72 | 61.37 | 35.30 | 25.54 |
| Serie San Lorenzo | 2001 | 17.15 | 16.20 | 33.02 | 27.47 | 54.71 | 45.00 | 49.86  | 19.11 | 40.36 | 48.69 | 47.20 | 29.17 |
| Serie San Lorenzo | 2002 | 20.33 | 19.37 | 20.99 | 38.21 | 41.26 | 33.76 | 23.21  | 22.80 | 42.52 | 34.40 | 27.27 | 18.23 |
| Serie San Lorenzo | 2003 | 11.32 | 16.09 | 22.55 | 46.61 | 58.83 | 71.15 | 35.90  | 40.54 | 38.15 | 48.62 | 41.02 | 31.82 |
| Serie San Lorenzo | 2004 | 18.25 | 18.22 | 26.66 | 30.94 | 44.09 | 28.28 | 59.22  | 31.70 | 52.39 | 51.12 | 48.16 | 27.57 |
| Serie San Lorenzo | 2005 | 23.07 | 17.52 | 12.79 | 30.50 | 37.73 | 49.58 | 24.96  | 27.64 | 40.22 | 44.53 | 60.68 | 24.96 |
| Serie San Lorenzo | 2006 | 19.23 | 22.18 | 32.37 | 45.09 | 51.89 | 47.55 | 21.33  | 31.40 | 39.07 | 61.91 | 51.12 | 37.04 |
| Serie San Lorenzo | 2007 | 26.35 | 14.96 | 24.06 | 41.42 | 70.65 | 40.10 | 38.78  | 38.36 | 45.91 | 55.38 | 34.98 | 30.43 |
| Serie San Lorenzo | 2008 | 24.91 | 27.88 | 22.56 | 40.28 | 54.24 | 67.70 | 65.07  | 79.41 | 55.95 | 99.52 | 99.15 | 36.67 |

## Formato 5. Embalses

| Nombre      | Mínimo Técnico (Mm3) | Máximo Técnico (Mm3) |
|-------------|----------------------|----------------------|
| Punchina    | 5.28                 | 58.49                |
| San Lorenzo | 19.61                | 184.16               |

## Formato 6. Filtraciones

Formato No Registrado

## Formato 7. Curvas de Operación Embalses

Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación

| Nombre     | Flujo Mínimo (m3/s) | Flujo Máximo (m3/s) |
|------------|---------------------|---------------------|
| Jaguas     | 0.00                | 86.80               |
| San Carlos | 0.00                | 276.60              |

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

| Planta                      | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-----------------------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| Termocentro Ciclo Combinado | Jet A1      | 8,760.00        | 1,729,830.43             | 1,729,830.43         | 1,562,427.49           | 1,729,830.43         | 1,674,029.45         | 1,729,830.43        | 1,674,029.45         | 1,729,830.43         | 1,729,830.43          | 1,674,029.45              | 1,729,830.43           | 1,674,029.45             |

**Formato 17.** Almacenamiento Combustible  
Formato No Registrado

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores

| Nombre   | Capacidad Efectiva Neta (MW) | Disponibilidad (%) |
|----------|------------------------------|--------------------|
| Calderas | 19.90                        | 35.00              |

Merilectrica S.A. Y C.I.A. S.C.A. E.S.P.

**Formato 1.** Plantas o Unidades Hidráulicas  
Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas  
Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre                     | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|----------------------------|------------------------------|-----------------------|---------|
| TERMOMERILECTRICA - DIESEL | 157.00                       | 10.2500               | 5.0000  |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12. Capacidad Túneles Chivor**  
Formato No Registrado

**Formato 13. Demanda Acueducto y Riego**  
Formato No Registrado

**Formato 14. Suministro Gas Natural**

| Planta                      | Campo         | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-----------------------------|---------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TERMOMERILECTRIC A - DIESEL | NO DISPONIBLE | 8,760.00        | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |

**Formato 15. Transporte Gas Natural**

| Planta                      | Punto Entrada | Punto Salida  | Transporte Diciembre (MBTU) | Transporte Enero (MBTU) | Transporte Febrero (MBTU) | Transporte Marzo (MBTU) | Transporte Abril (MBTU) | Transporte Mayo (MBTU) | Transporte Junio (MBTU) | Transporte Julio (MBTU) | Transporte Agosto (MBTU) | Transporte Septiembre (MBTU) | Transporte Octubre (MBTU) | Transporte Noviembre (MBTU) |
|-----------------------------|---------------|---------------|-----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|
| TERMOMERILECTRIC A - DIESEL | NO DISPONIBLE | NO DISPONIBLE | 0.00                        | 0.00                    | 0.00                      | 0.00                    | 0.00                    | 0.00                   | 0.00                    | 0.00                    | 0.00                     | 0.00                         | 0.00                      | 0.00                        |

**Formato 16. Suministro Combustible Diferente a Gas**

| Planta                      | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-----------------------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TERMOMERILECTRIC A - DIESEL | DIESEL      | 8,760.00        | 1,222,198.00             | 1,222,198.00         | 1,103,921.00           | 1,222,198.00         | 1,182,772.00         | 1,222,198.00        | 1,182,772.00         | 1,222,198.00         | 1,222,198.00          | 1,182,772.00              | 1,222,198.00           | 1,182,772.00             |

**Formato 17. Almacenamiento Combustible**

| Planta                      | Combustible | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|-----------------------------|-------------|--------------------------|----------------------------|
| TERMOMERILECTRIC A - DIESEL | DIESEL      | 0.00                     | 0.00                       |

**Formato 18. Energía Contratada**  
Formato No Registrado

**Formato 19.** Plantas Menores  
Formato No Registrado

Promotora De Energia Electrica De Cartagena Y Compañia Sociedad S.A.

**Formato 1.** Plantas o Unidades Hidráulicas

Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas

Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre       | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|--------------|------------------------------|-----------------------|---------|
| PROELECTRICA | 90.00                        | 9.5181                | 6.0251  |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

| Planta       | Combustible | Horas Operación | Energia Diciembre (MBTU) | Energia Enero (MBTU) | Energia Febrero (MBTU) | Energia Marzo (MBTU) | Energia Abril (MBTU) | Energia Mayo (MBTU) | Energia Junio (MBTU) | Energia Julio (MBTU) | Energia Agosto (MBTU) | Energia Septiembre (MBTU) | Energia Octubre (MBTU) | Energia Noviembre (MBTU) |
|--------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| PROELECTRICA | JETA1       | 8,760.00        | 572,716.00               | 572,716.00           | 517,292.00             | 572,716.00           | 554,241.00           | 572,716.00          | 554,241.00           | 572,716.00           | 572,716.00            | 554,241.00                | 572,716.00             | 554,241.00               |

**Formato 17.** Almacenamiento Combustible

| Planta       | Combustible | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|--------------|-------------|--------------------------|----------------------------|
| PROELECTRICA | JETA1       | 235,200.00               | 25,890.00                  |

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores  
Formato No Registrado

Termocandelaria S.C.A. E.S.P.

**Formato 1.** Plantas o Unidades Hidráulicas  
Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas  
Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|--------|------------------------------|-----------------------|---------|
| TCD1   | 157.00                       | 11.1000               | 4.0182  |
| TCD2   | 157.00                       | 11.1000               | 10.9457 |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

| Planta | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|--------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TCD1   | FUEL OIL 2  | 8,760.00        | 1,253,926.32             | 1,253,926.32         | 1,132,578.61           | 1,253,926.32         | 1,213,477.08         | 1,253,926.32        | 1,213,477.08         | 1,253,926.32         | 1,253,926.32          | 1,213,477.08              | 1,253,926.32           | 1,213,477.08             |
| TCD2   | FUEL OIL 2  | 8,760.00        | 1,177,715.66             | 1,177,715.66         | 1,063,743.18           | 1,177,715.66         | 1,139,724.84         | 1,177,715.66        | 1,139,724.84         | 1,177,715.66         | 1,177,715.66          | 1,139,724.84              | 1,177,715.66           | 1,139,724.84             |

**Formato 17.** Almacenamiento Combustible

| Planta | Combustible   | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|--------|---------------|--------------------------|----------------------------|
| TCD1   | FUEL OIL No 2 | 660,000.00               | 0.00                       |
| TCD2   | FUEL OIL No 2 | 660,000.00               | 0.00                       |

**Formato 18.** Energía Contratada

| Planta | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|--------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TCD1   | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |
| TCD2   | 0.00                     | 0.00                 | 0.00                   | 0.00                 | 0.00                 | 0.00                | 0.00                 | 0.00                 | 0.00                  | 0.00                      | 0.00                   | 0.00                     |

**Formato 19.** Plantas Menores  
Formato No Registrado



Termoemcali I S.A. E.S.P

**Formato 1.** Plantas o Unidades Hidráulicas  
Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas  
Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre             | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|--------------------|------------------------------|-----------------------|---------|
| TermoEmcali I FOil | 212.84                       | 6.9735                | 6.4500  |
| TermoEmcali I Gas  | 229.07                       | 6.4732                | 9.4000  |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12. Capacidad Túneles Chivor**  
Formato No Registrado

**Formato 13. Demanda Acueducto y Riego**  
Formato No Registrado

**Formato 14. Suministro Gas Natural**

| Planta            | Campo   | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|-------------------|---------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TermoEmcali I Gas | CUSIANA | 1,032.00        | 496,000.00               | 496,000.00           | 448,000.00             | 496,000.00           | 480,000.00           | 496,000.00          | 480,000.00           | 496,000.00           | 496,000.00            | 480,000.00                | 496,000.00             | 480,000.00               |

**Formato 15. Transporte Gas Natural**

| Planta            | Punto Entrada | Punto Salida | Transporte Diciembre (MBTU) | Transporte Enero (MBTU) | Transporte Febrero (MBTU) | Transporte Marzo (MBTU) | Transporte Abril (MBTU) | Transporte Mayo (MBTU) | Transporte Junio (MBTU) | Transporte Julio (MBTU) | Transporte Agosto (MBTU) | Transporte Septiembre (MBTU) | Transporte Octubre (MBTU) | Transporte Noviembre (MBTU) |
|-------------------|---------------|--------------|-----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|
| TermoEmcali I Gas | Cusiana       | Cali         | 130,200.00                  | 130,200.00              | 117,600.00                | 130,200.00              | 126,000.00              | 130,200.00             | 126,000.00              | 130,200.00              | 130,200.00               | 126,000.00                   | 130,200.00                | 126,000.00                  |

**Formato 16. Suministro Combustible Diferente a Gas**

| Planta             | Combustible                | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|--------------------|----------------------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| TermoEmcali I FOil | Diesel - Fuel Oil #2(ACPM) | 7,728.00        | 1,106,615.68             | 1,106,615.68         | 999,523.84             | 1,106,615.68         | 1,070,918.40         | 1,106,615.68        | 1,070,918.40         | 1,106,615.68         | 1,106,615.68          | 1,070,918.40              | 1,106,615.68           | 1,070,918.40             |

**Formato 17. Almacenamiento Combustible**

| Planta             | Combustible                | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|--------------------|----------------------------|--------------------------|----------------------------|
| TermoEmcali I FOil | Diesel - Fuel Oil #2(ACPM) | 1,000,000.00             | 0.00                       |

**Formato 18. Energía Contratada**

| Planta | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|--------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
|--------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|

|                       |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| TermoEmcali I<br>FOil | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TermoEmcali I<br>Gas  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Formato 19.** Plantas Menores  
Formato No Registrado

Termoflores S.A. E.S.P.

**Formato 1.** Plantas o Unidades Hidráulicas  
Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas  
Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre             | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|--------------------|------------------------------|-----------------------|---------|
| FLORES I - DIESEL  | 152.00                       | 7.7126                | 13.0000 |
| FLORES IV - DIESEL | 450.00                       | 7.3000                | 5.0000  |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

| Planta             | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|--------------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| FLORES I - DIESEL  | DIESEL      | 8,760.00        | 872,204.00               | 872,204.00           | 787,796.00             | 872,204.00           | 844,068.00           | 872,204.00          | 844,068.00           | 872,204.00           | 872,204.00            | 844,068.00                | 872,204.00             | 844,068.00               |
| FLORES IV - DIESEL | DIESEL      | 8,760.00        | 2,444,040.00             | 2,444,040.00         | 2,207,520.00           | 2,444,040.00         | 2,365,200.00         | 2,444,040.00        | 2,365,200.00         | 2,444,040.00         | 2,444,040.00          | 2,365,200.00              | 2,444,040.00           | 2,365,200.00             |

**Formato 17.** Almacenamiento Combustible

| Planta             | Combustible | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|--------------------|-------------|--------------------------|----------------------------|
| FLORES I - DIESEL  | DIESEL      | 22,636.00                | 0.00                       |
| FLORES IV - DIESEL | DIESEL      | 30,000.00                | 0.00                       |

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores  
Formato No Registrado

Termotasajero S.A. E.S.P

**Formato 1.** Plantas o Unidades Hidráulicas  
Formato No Registrado

**Formato 2.** Topología Plantas Hidráulicas  
Formato No Registrado

**Formato 2a.** Diagramas Topología  
Formato No Registrado

**Formato 3.** Plantas o Unidades Térmicas

| Nombre     | Capacidad Efectiva Neta (MW) | Eficiencia (MBTU/MWh) | IHF (%) |
|------------|------------------------------|-----------------------|---------|
| Tasajero I | 155.32                       | 9.4663                | 1.5167  |

**Formato 4.** Caudal Medio Mensual  
Formato No Registrado

**Formato 5.** Embalses  
Formato No Registrado

**Formato 6.** Filtraciones  
Formato No Registrado

**Formato 7.** Curvas de Operación Embalses  
Formato No Registrado

**Formato 8.** Capacidad Arcos de Descarga  
Formato No Registrado

**Formato 9.** Arco de Bombeo  
Formato No Registrado

**Formato 10.** Capacidad Máxima Arco Generación  
Formato No Registrado

**Formato 11.** Descarga Máxima Embalse Bogotá  
Formato No Registrado

**Formato 12.** Capacidad Túneles Chivor  
Formato No Registrado

**Formato 13.** Demanda Acueducto y Riego  
Formato No Registrado

**Formato 14.** Suministro Gas Natural  
Formato No Registrado

**Formato 15.** Transporte Gas Natural  
Formato No Registrado

**Formato 16.** Suministro Combustible Diferente a Gas

| Planta     | Combustible | Horas Operación | Energía Diciembre (MBTU) | Energía Enero (MBTU) | Energía Febrero (MBTU) | Energía Marzo (MBTU) | Energía Abril (MBTU) | Energía Mayo (MBTU) | Energía Junio (MBTU) | Energía Julio (MBTU) | Energía Agosto (MBTU) | Energía Septiembre (MBTU) | Energía Octubre (MBTU) | Energía Noviembre (MBTU) |
|------------|-------------|-----------------|--------------------------|----------------------|------------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|---------------------------|------------------------|--------------------------|
| Tasajero I | CARBON      | 8,760.00        | 1,093,907.45             | 1,093,907.45         | 988,045.44             | 1,093,907.45         | 1,058,620.12         | 1,093,907.45        | 1,058,620.12         | 1,093,907.45         | 1,093,907.45          | 1,058,620.12              | 1,093,907.45           | 1,058,620.12             |

**Formato 17.** Almacenamiento Combustible

| Planta     | Combustible | Capacidad Almacenamiento | Cantidad Almacenada (MBTU) |
|------------|-------------|--------------------------|----------------------------|
| Tasajero I | CARBON      | 3,033,781.19             | 0.00                       |

**Formato 18.** Energía Contratada  
Formato No Registrado

**Formato 19.** Plantas Menores  
Formato No Registrado