

COMISIÓN DE REGULACIÓN DE ENERGÍA Y GAS - CREG

DECLARACIÓN DE PARÁMETROS PARA EL CÁLCULO DE LA ENFICC
PARA LA VIGENCIA DE DICIEMBRE DE 2009 A NOVIEMBRE DE 2010

Bogotá, octubre 23 de 2009

Formato 1. Plantas o Unidades Hidráulicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
CHIVOR	1,000.00	6.9730	9.2887

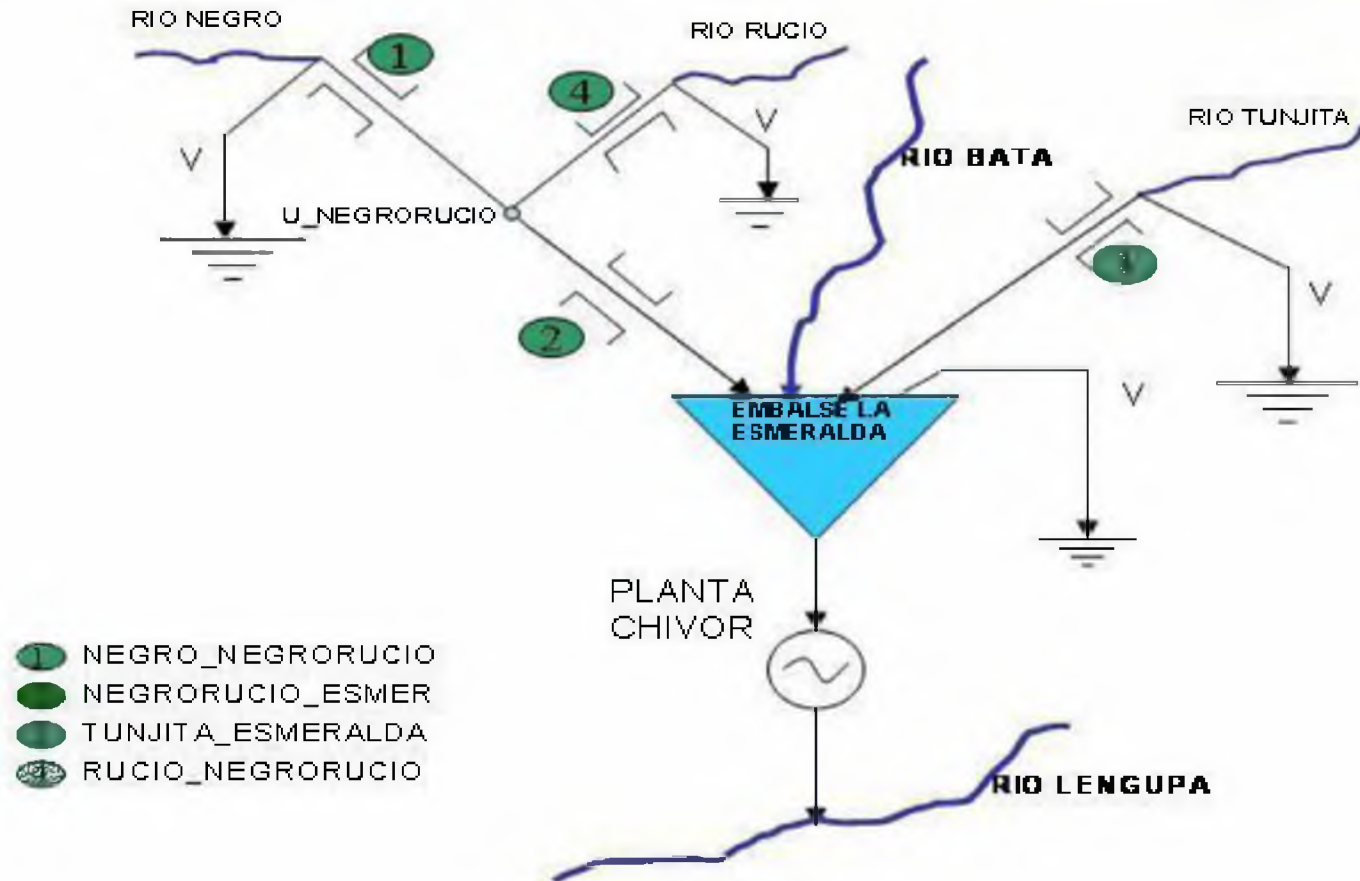
Formato 2. Topología Plantas Hidráulicas

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.

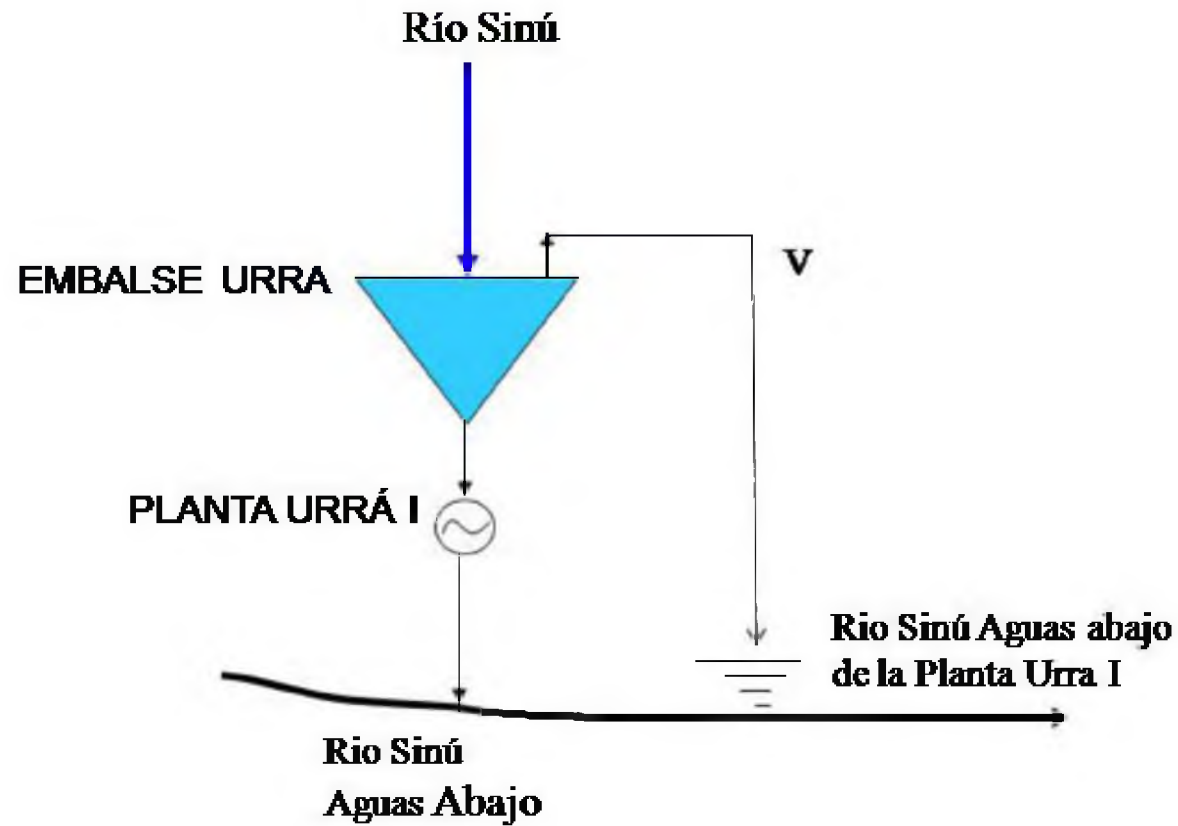
Formato 1. Plantas o Unidades Hidráulicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
URRA I	338.00	0.4693	43.0266

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 aguas abajo de la planta URRA I			
URRA	P	URRA I		URRA			RIO SINU 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.

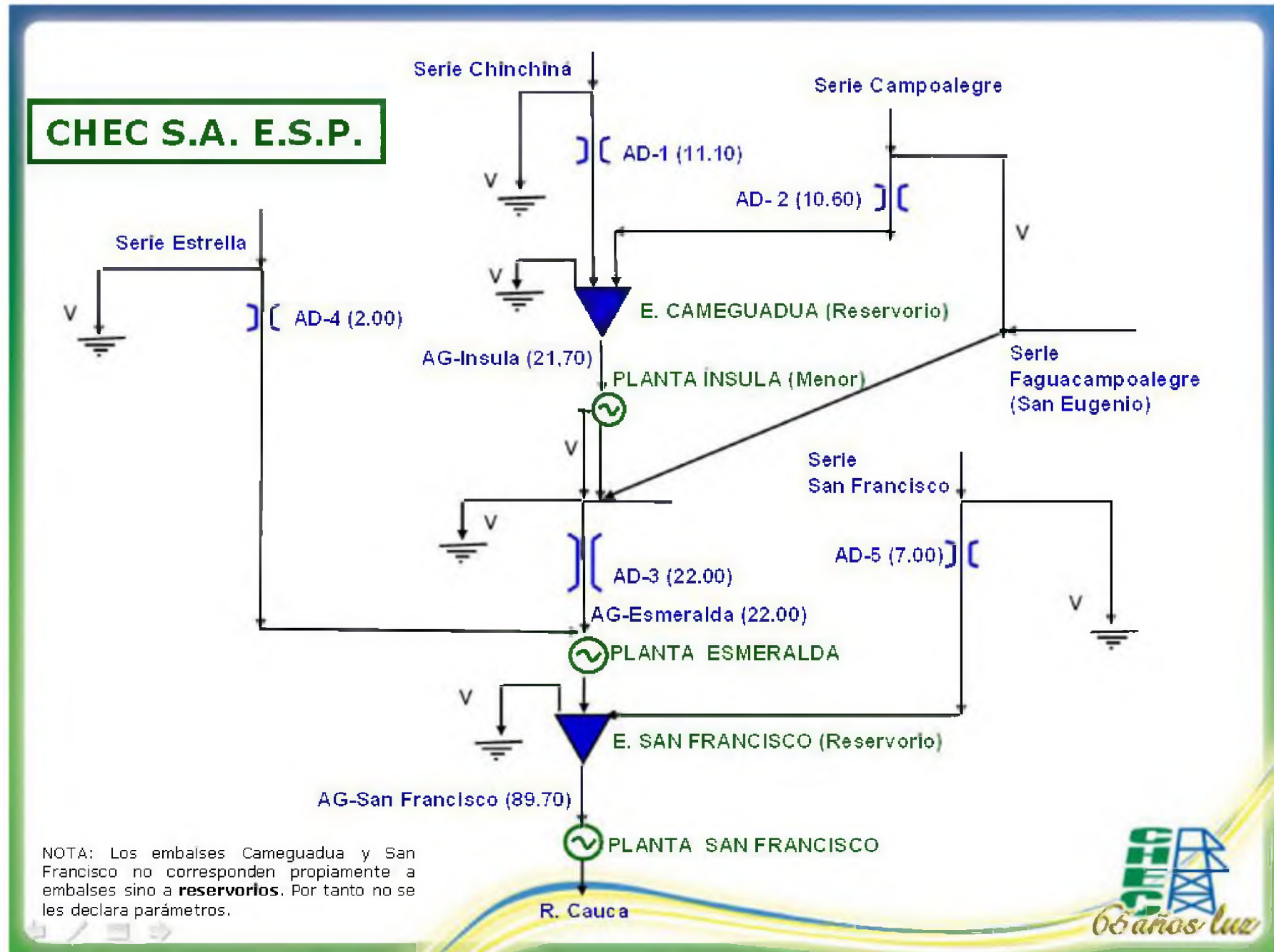
Formato 1. Plantas o Unidades Hidráulicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
Esmeralda	30.00	1.3721	6.7132
San Francisco	135.00	1.5883	74.1257

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 alegre (San Eugenio)			
CHEC1	AD	AD-3	Faguacampo alegre (San Eugenio)		Insula	Vertimiento Planta Insula			Esmeralda					Tierra
CHEC1	AD	AD-4	Quebrada La Estrella						Esmeralda					Tierra
CHEC1	AD	AD-5	San Francisco					San Francisco						Tierra
CHEC1	E	Cameguadua				AD-1 y AD- 2			Insula					Tierra
CHEC1	E	San Francisco			Esmeralda	AD-5			San Francisco					Tierra
CHEC1	P	Esmeralda				AD-3 y AD- 4		San Francisco						
CHEC1	P	Insula		Cameguadua						AD-3				AD-3
CHEC1	P	San Francisco		San Francisco			Cauca							

Formato 2a. Diagramas Topología



Formato 3. Plantas o Unidades Térmicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MBTU/MWh)	IHF (%)
TERMODORADA	50.66	9.7103	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

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)
TERMODO RADA	GUAJIRA	8,760.00	298,344.00	298,344.00	269,472.00	298,344.00	288,720.00	298,344.00	288,720.00	298,344.00	298,344.00	288,720.00	298,344.00	288,720.00

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)
TERMODO RADA	BARRANCA	LA DORADA	384,400.00	384,400.00	347,200.00	384,400.00	372,000.00	384,400.00	372,000.00	384,400.00	384,400.00	372,000.00	384,400.00	372,000.00

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 (%)
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

Central Termoelectrica El Morro 1 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

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 (%)
CIMARRON	19.90	65.00
MORRO1	19.90	80.00
MORRO2	19.90	55.00

Compañía De Electricidad De Tuluá 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	10.28
Rio Frio II	10.00	15.20
Rumor	2.50	15.96

Formato 1. Plantas o Unidades Hidráulicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
Betania	540.00	0.6381	4.0772
Guavio	1,200.00	9.8732	0.3346
La Guaca	324.00	9.7974	0.6057
Paraiso	276.00	8.3430	0.8369

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	E	Embalse Betania	Serie Betania							Arco de Generacion Betania				Tierra
Betania	AG	Arco de Generacion Betania		Embalse Betania					Planta Betania					
Betania	P	Planta Betania				Arco de Generacion Betania				Tierra				
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	OU	Demanda Riego Rio Bogota hasta Achury				Rio Bogota hasta Achury				Retorno Riego Rio Bogota hasta Achury				
Paraiso La Guaca	AD	Descarga Sisga		Embalse Sisga						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 (SanRafaelSa poTibitoc)				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 (SanRafaelSa poTibitoc)				
Paraiso La Guaca	AD	Sistema Acueducto Bogota (SanRafaelSa poTibitoc)	Serie Teusaca (Hidrologia Antigua)			Tunel Chuza + Compuerta Espino				Rio Bogota entre Espino y Alicachin + Demanda Sistema Acueducto Bogota (SanRafaelSa poTibitoc)				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	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						
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	AG	Arco de Generacion Paraiso		Embalse Muna					Planta Paraiso					
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 La Guaca			Planta Paraiso + Vertimiento Planta Paraiso				Planta La Guaca					
Paraiso La Guaca	E	Embalse Sisga	Serie Sisga							Descarga Sisga				Rio Bogota hasta Achury
Paraiso La Guaca	P	Planta La Guaca				Arco de Generacion La Guaca				Tierra				

Paraiso La Guaca	OU	Retorno Riego Rio Bogota hasta Achury				Demanda Riego Rio Bogota hasta Achury				Rio Bogota hasta Achury				
------------------	----	---------------------------------------	--	--	--	---------------------------------------	--	--	--	-------------------------	--	--	--	--

Formato 2a. Diagramas Topología

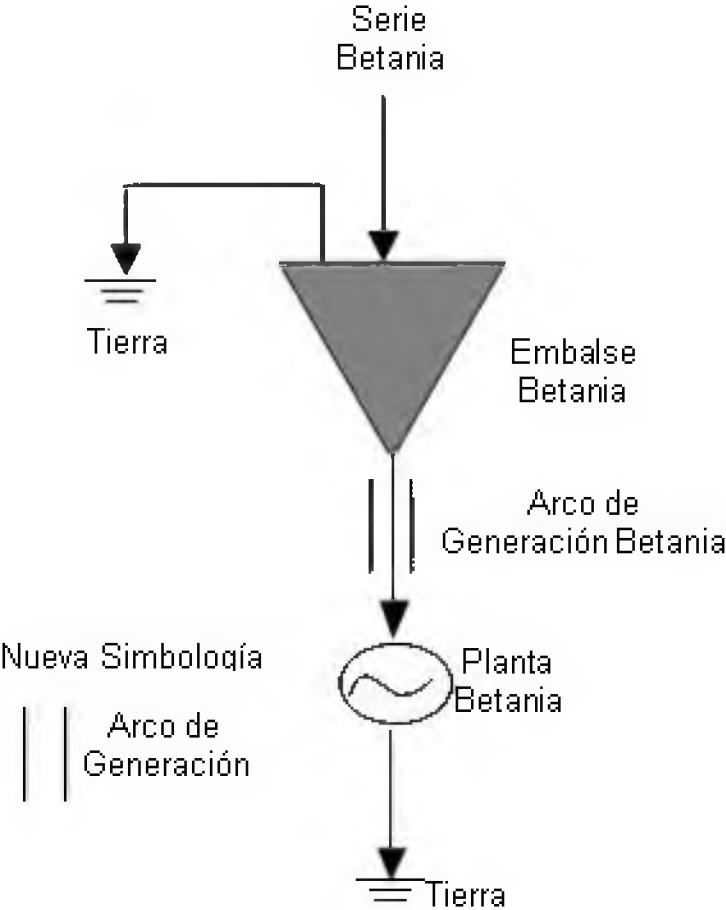


Diagrama Topológico Betania

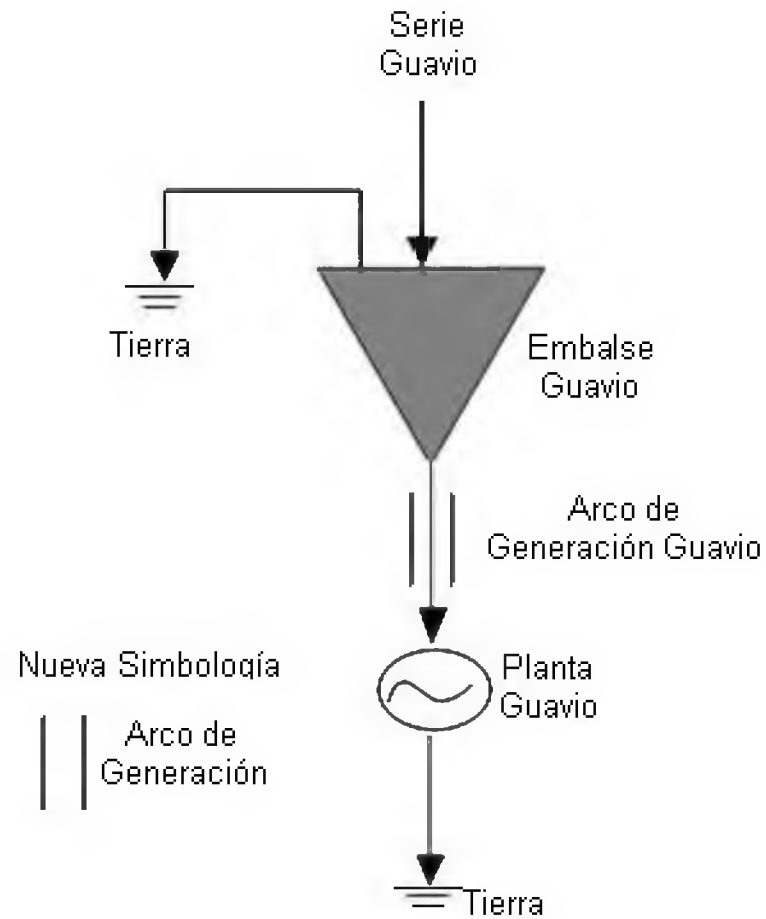
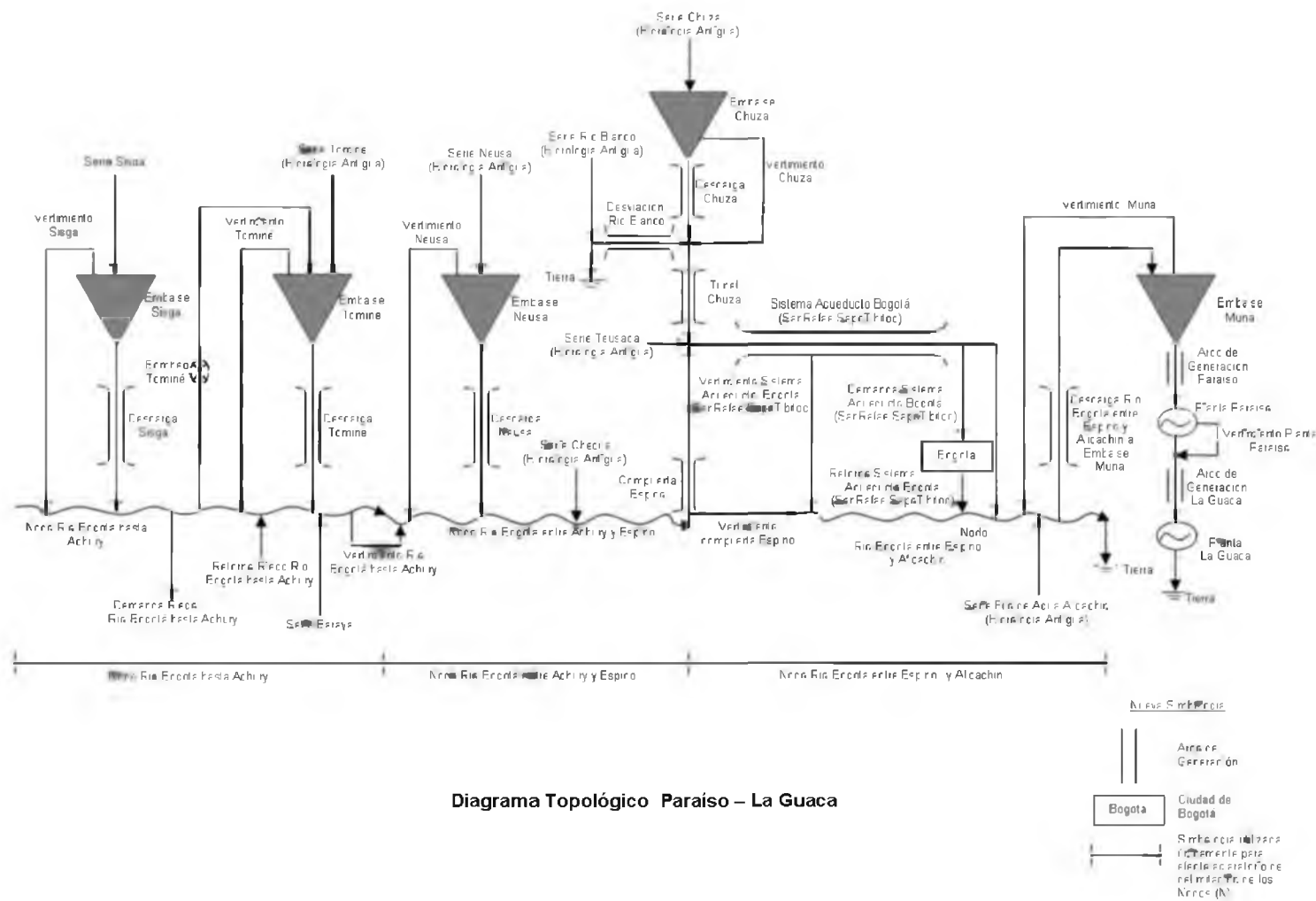


Diagrama Topológico Guavio

Formato 3. Plantas o Unidades Térmicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MBTU/MWh)	IHF (%)
Cartagena 1	60.90	11.1879	12.3852
Cartagena 2	60.00	11.0190	14.4933



Cartagena 3	65.89	10.9365	17.1526
Termozipa 2	34.23	12.7586	7.1227
Termozipa 3	62.73	9.6027	18.0558
Termozipa 4	63.71	9.0118	9.6010
Termozipa 5	63.43	8.6793	4.6079

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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 Agua Alicachin (Hidrologia 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 Agua Alicachin (Hidrologia 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 Agua Alicachin (Hidrologia 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 Agua Alicachin (Hidrologia 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 Agua Alicachin (Hidrologia 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 Agua Alicachin (Hidrologia 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 Agua Alicachin (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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 (Hidrologia 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	495.33	1,299.99
Chuza	12.50	239.40
Guavio	18.67	794.06
Muna	0.37	12.54
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	0.00	0.00	0.00	0.00	0.00	20
Sistema Acueducto Bogota (SanRafaelSapoTibitoc)	15.09	0.00	0.00	0.00	0.00	0.00	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	444,136.52	444,136.52	401,155.56	444,136.52	429,809.53	444,136.52	429,809.53	444,136.52	444,136.52	429,809.53	444,136.52	429,809.53
Cartagena 2	FO No.6 o equivalente	8,760.00	420,597.17	420,597.17	379,894.22	420,597.17	407,029.52	420,597.17	407,029.52	420,597.17	420,597.17	407,029.52	420,597.17	407,029.52
Cartagena 3	FO No.6 o equivalente	8,760.00	444,170.24	444,170.24	401,186.03	444,170.24	429,842.17	444,170.24	429,842.17	444,170.24	444,170.24	429,842.17	444,170.24	429,842.17
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	367,248.31	367,248.31	331,708.15	367,248.31	355,401.59	367,248.31	355,401.59	367,248.31	367,248.31	355,401.59	367,248.31	355,401.59
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	33,253.30	143,068.70
Cartagena 2	FUEL OIL No.6 o equivalente	31,490.87	137,562.80
Cartagena 3	FUEL OIL No.6 o equivalente	33,255.83	146,368.60
Termozipa 2	Carbon	45,917.40	406,858.00
Termozipa 3	Carbon	55,878.50	629,199.40
Termozipa 4	Carbon	58,754.40	774,775.70
Termozipa 5	Carbon	59,449.70	684,166.90

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

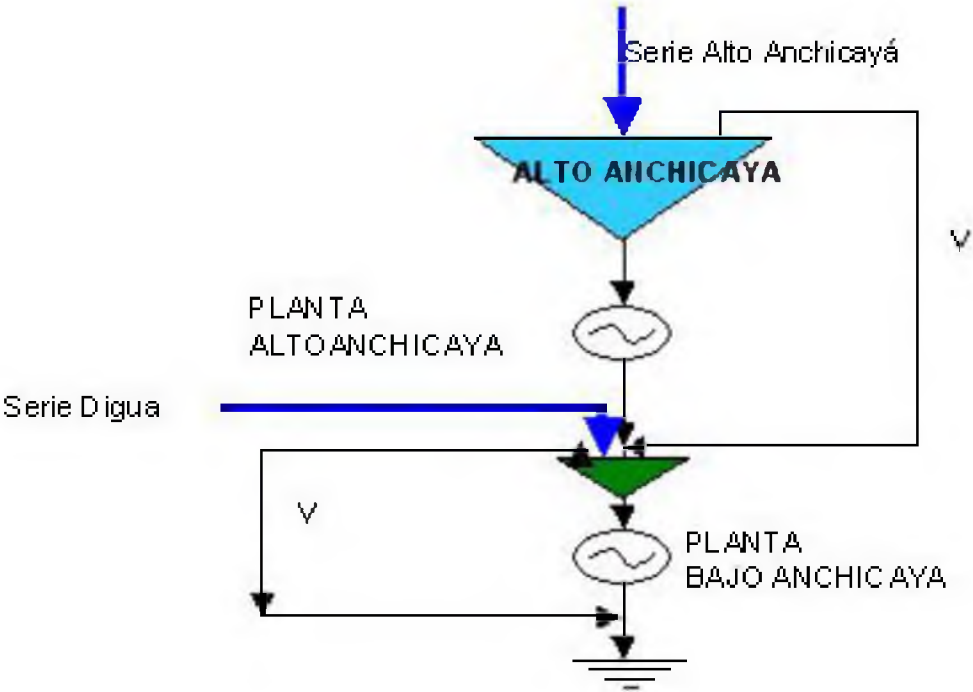
Formato 1. Plantas o Unidades Hidráulicas

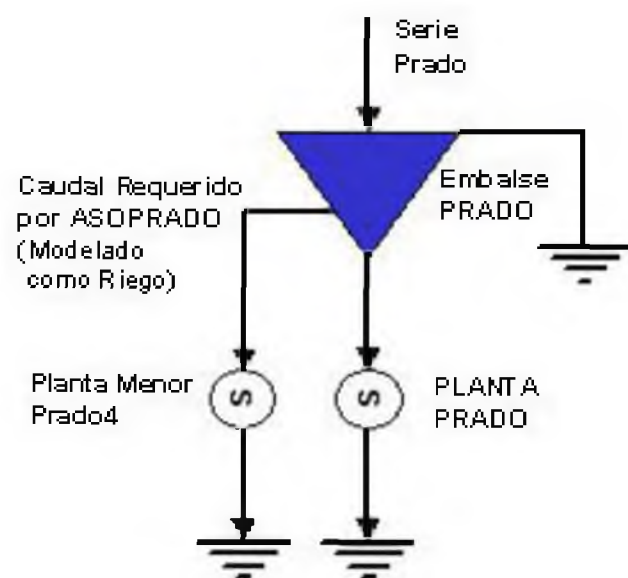
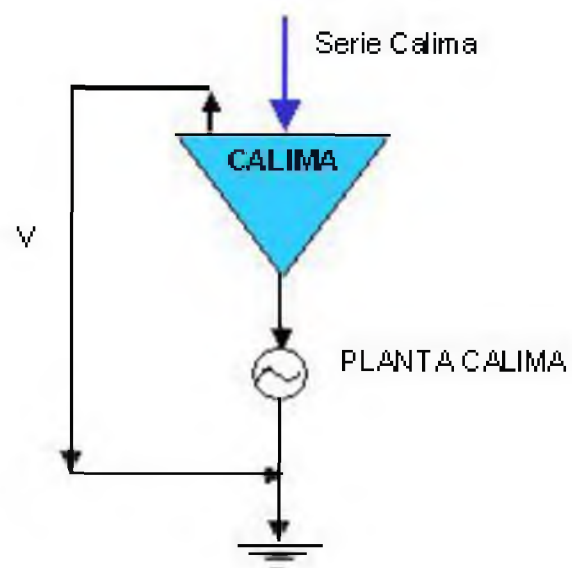
Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
Alto Anchicaya	355.00	3.5491	12.8864
Bajo Anchicaya	74.00	0.7004	10.5047
Calima	132.00	1.8030	5.7399
Prado	46.00	0.4904	10.1436
Salvajina	285.00	0.9998	6.6888

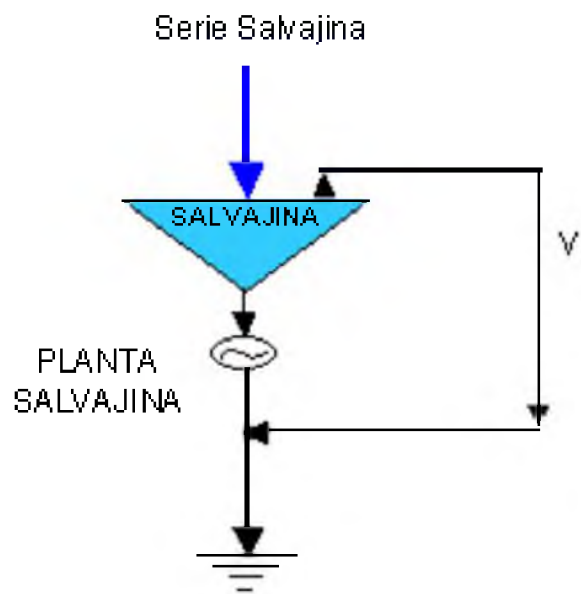
Formato 2. Topología Plantas Hidráulicas

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	2.7819

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	760.12

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

Nombre	Flujo Mínimo (m3/s)	Flujo Máximo (m3/s)
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	0.00	0.00
Central Tumaco	0.00	0.00
Incauca	3.50	0.00
Nima	6.70	12.05
Prado4	5.00	18.03
Providencia	0.00	0.00
Rio Cali	1.80	24.57
Rio Paila	0.00	0.00

Empresas Públicas De Medellín E.S.P.

Formato 1. Plantas o Unidades Hidráulicas

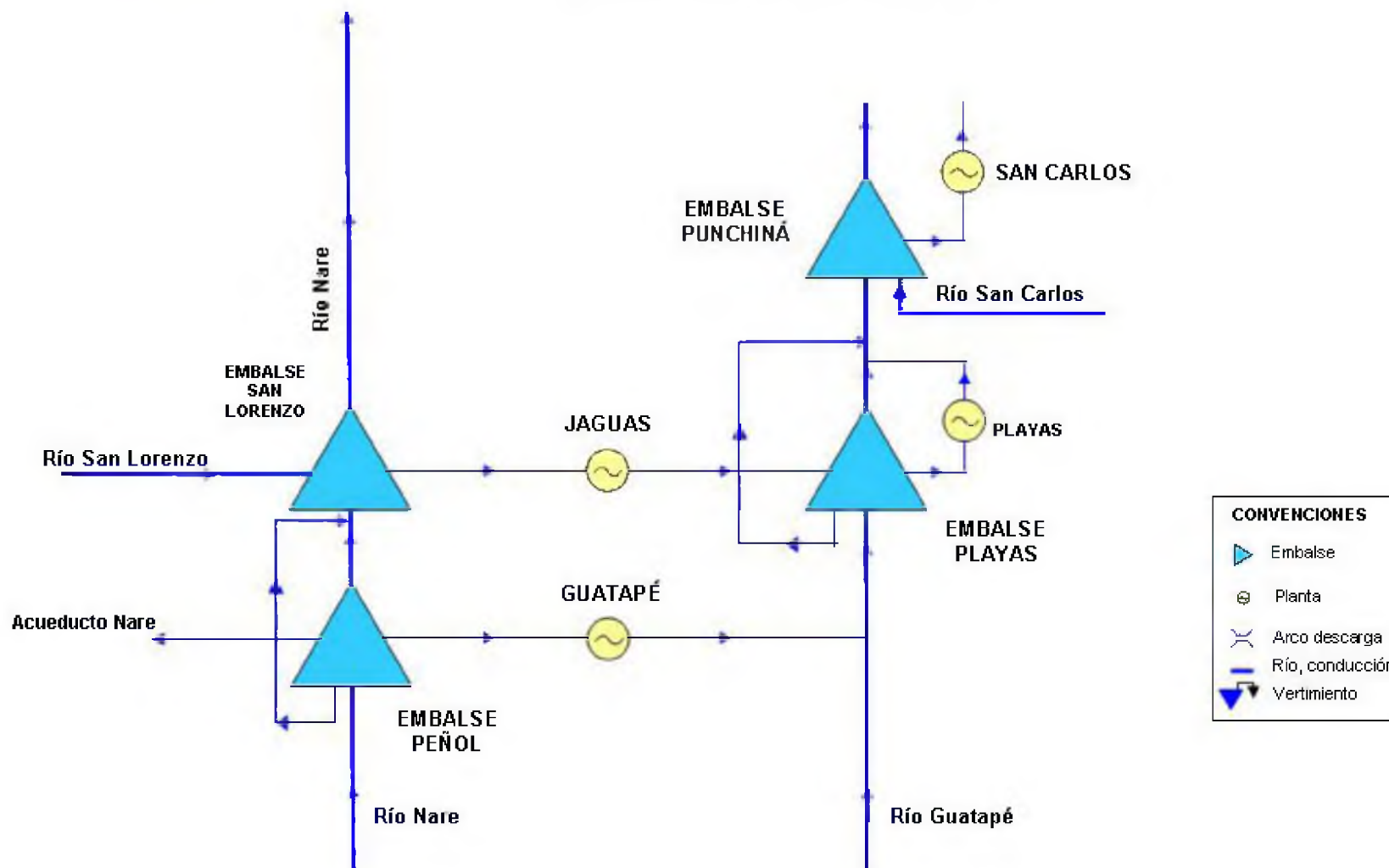
Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
GUADALUPE3	270.00	5.1553	0.3495
GUADALUPE4	202.00	4.1852	2.6154
GUATAPE	560.00	7.7110	0.6172
LATASAJERA	306.00	7.7309	0.2128
PLAYAS	201.00	1.5880	0.2461
PORCE2	405.00	1.9773	0.2316
TRONERAS	40.00	0.7254	0.2754

Formato 2. Topología Plantas Hidráulicas

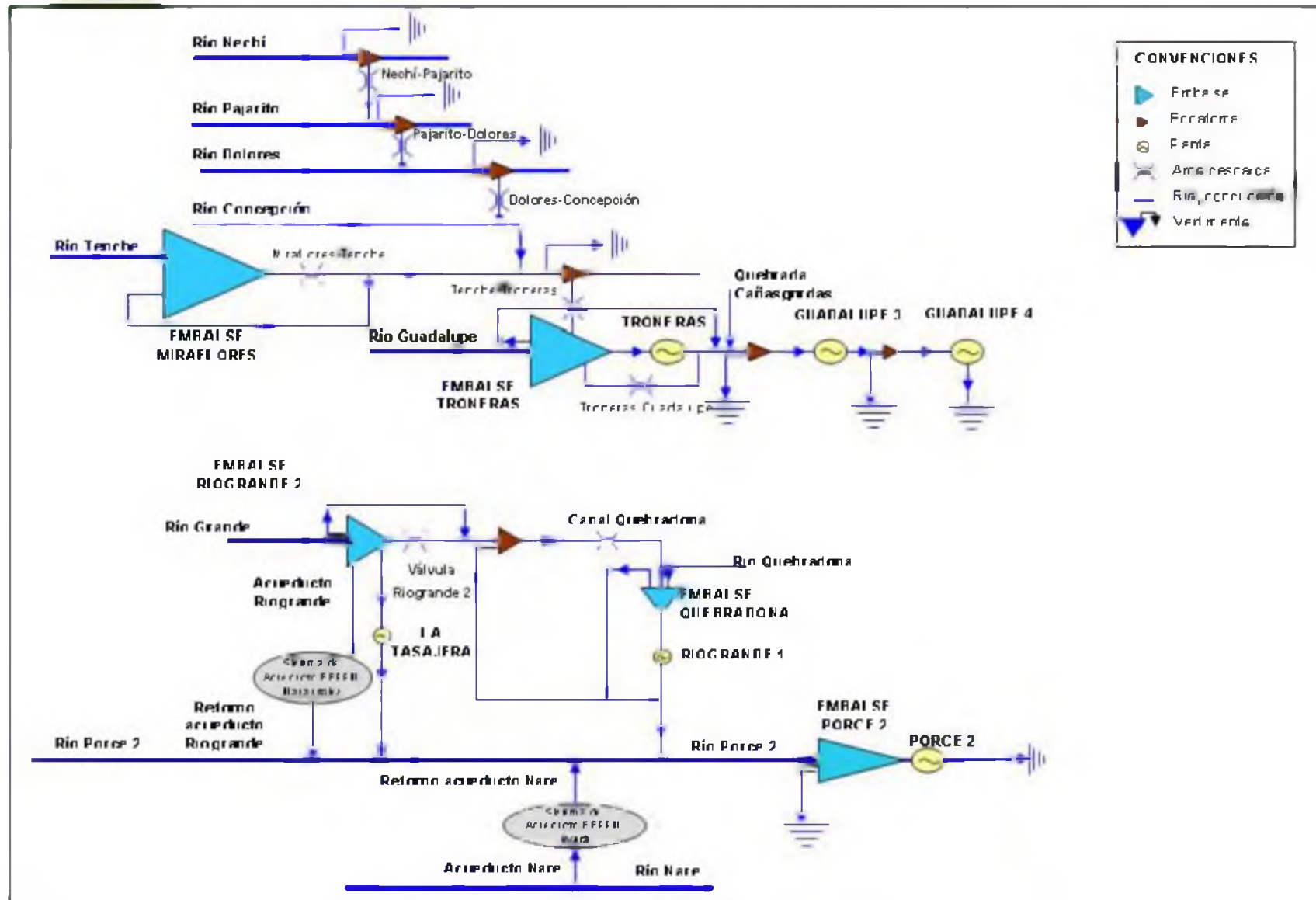
Nombre Sistema	Elemento Clase	Elemento Nombre	Aportes Rio	Aportes Embalse	Aportes Planta	Aportes Otro	Descargas Rio	Descargas Embalse	Descargas Planta	Descargas Otro	Vertimiento s Rio	Vertimiento s Embalse	Vertimiento s Planta	Vertimiento s Otro
Guatape	E	Penol	NARE						GUATAPE	Acueducto Nare		San Lorenzo		
Guatape	E	Playas	GUATAPE		GUATAPE+ JAGUAS				PLAYAS			Punchina		
Guatape	F	Acueducto NARE		PENOL				Porce2						
Guatape	P	Guatape		PENOL				Playas						
Guatape	P	Playas		PLAYAS				Punchina						
Guatron	AD	Dolores- Concepcion	DOLORES			Pajarito- Dolores				Tenche- Troneras				Tierra
Guatron	AD	Miraflores- Tenche		MIRAFLOR ES						Tenche- Troneras				
Guatron	AD	Nechi- Pajarito	NECHI							Pajarito- Dolores				Tierra
Guatron	AD	Pajarito- Dolores	PAJARITO			Nechi- Pajarito				Dolores- Concepcion				Tierra
Guatron	AD	Tenche- Troneras	CONCEPCI ON			Dolores- Concepcion+ Miraflores- Tenche+Vert imientoEmba lseMiraflores		Troneras						Tierra
Guatron	AD	Troneras- Guadalupe		TRONERAS					GUADALUP E3					
Guatron	E	Miraflores	TENCHE							Miraflores- Tenche				Tenche- Troneras

Guatron	E	Troneras	GUADALUP E			Tenche- Troneras			TRONERAS	Troneras- Guadalupe			GUADALUP E3	
Guatron	P	Guadalupe3	CANASGO RDAS		TRONERAS	Troneras- Guadalupe+ VertimientoE mbalseTrone ras			GUADALUP E4			Tierra		
Guatron	P	Guadalupe4			GUADALUP E3			Tierra				Tierra		
Guatron	P	Troneras		TRONERAS					GUADALUP E3					
Porce	AD	Canal Quebradona				Válvula Riogrande2+ VertimientoE mbalseRiogr ande2		Quebradona				Porce2		
Porce	AD	Valvula Riogrande2		RIOGRAND E2						Canal Quebradona				
Porce	E	Porce2	PORCE2		LATASAJE RA+RIOGR ANDE1	Acueducto Nare+Acued uctoGrande+ Vertimiento CanalQuebra dona+Vertim ientoEmbalse Quebradona			PORCE2			Tierra		
Porce	E	Quebradona	QUEBRAD ONA			Canal Quebradona			RIOGRAND E1			Porce2		
Porce	E	Riogrande2	GRANDE						LATASAJE RA	Valvula Riogrande2+ Acueducto Grande				Canal Quebradona
Porce	F	Acueducto GRANDE		RIOGRAND E2				Porce2						
Porce	P	Latasajera		RIOGRAND E2				Porce2						
Porce	P	Porce2		PORCE2				Tierra						
Porce	P	Riogrande1		QUEBRAD ONA				Porce2						

CADENA GUATAPÉ - PLAYAS



CADENA HIDRÁULICA PORCE



Formato 3. Plantas o Unidades Térmicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MBTU/MWh)	IHF (%)
TERMOSIERRA	460.01	6.2712	9.1383

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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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
CONCEPCIO N	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 E	1937										20.88	22.88	22.69
GUADALUP 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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	5.01	100.54
PENOL	68.47	1,071.69
PLAYAS	19.28	69.56
PORCE2	47.45	142.71
QUEBRADONA	1.33	1.87
RIOGRANDE2	47.61	185.44
TRONERAS	8.98	28.91

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		47.61	
RIOGRANDE2	2		47.61	
RIOGRANDE2	3		47.61	
RIOGRANDE2	4		47.61	
RIOGRANDE2	5		47.61	
RIOGRANDE2	6		47.61	
RIOGRANDE2	7		47.61	
RIOGRANDE2	8		47.61	
RIOGRANDE2	9		47.61	
RIOGRANDE2	10		47.61	
RIOGRANDE2	11		47.61	
RIOGRANDE2	12		47.61	

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	3.92						85
NARE	4.95						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	Guajira con punto de entrega en Barrancabermeja	8,760.00	1,705,000.00	1,705,000.00	1,540,000.00	1,705,000.00	1,650,000.00	1,705,000.00	1,650,000.00	1,705,000.00	1,705,000.00	1,650,000.00	1,705,000.00	1,650,000.00

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	Centro Operacional de Gas de Barrancabermeja-COGB	Corregimiento La Sierra. Brida salida conexion gasoducto troncal con ramal que conecta instalacion de EEPPM	1,860,000.00	1,860,000.00	1,680,000.00	1,860,000.00	1,800,000.00	1,860,000.00	1,800,000.00	1,860,000.00	1,860,000.00	1,800,000.00	1,860,000.00	1,800,000.00
-------------	---	---	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

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 (%)
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
JEPIRACHI	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	17.3124
BARRANQUILLA 4	60.00	11.8000	7.6250
GUAJIRA 1	145.00	10.3000	28.6686
GUAJIRA 2	139.00	10.5000	17.9742
TEBSA	791.00	7.3085	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	8,760.00	2,883,000.00	2,574,860.00	2,325,680.00	2,574,860.00	2,491,800.00	2,574,860.00	2,491,800.00	2,574,860.00	2,574,860.00	2,491,800.00	2,574,860.00	2,491,800.00
TEBSA	La Creciente	8,760.00	1,079,017.00	1,395,000.00	1,260,000.00	1,395,000.00	1,350,000.00	1,395,000.00	1,350,000.00	1,395,000.00	1,395,000.00	1,350,000.00	1,395,000.00	1,350,000.00

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)
TEBSA	Ballena	Tebsa	4,190,983.00	3,875,000.00	3,500,000.00	3,875,000.00	3,750,000.00	3,875,000.00	3,750,000.00	3,875,000.00	3,875,000.00	3,750,000.00	3,875,000.00	3,750,000.00
TEBSA	La Creciente	Tebsa	1,079,017.00	1,395,000.00	1,260,000.00	1,395,000.00	1,350,000.00	1,395,000.00	1,350,000.00	1,395,000.00	1,395,000.00	1,350,000.00	1,395,000.00	1,350,000.00

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)
BARRANQUILLA 3	FUEL OIL No. 6	8,760.00	513,341.00	513,341.00	463,663.00	513,341.00	496,782.00	513,341.00	496,782.00	513,341.00	513,341.00	496,782.00	513,341.00	496,782.00
BARRANQUILLA 4	FUEL OIL No. 6	8,760.00	513,341.00	513,341.00	463,663.00	513,341.00	496,782.00	513,341.00	496,782.00	513,341.00	513,341.00	496,782.00	513,341.00	496,782.00
GUAJIRA 1	CARBON	8,760.00	1,029,577.00	1,029,577.00	929,940.00	1,029,577.00	996,365.00	1,029,577.00	996,365.00	1,029,577.00	1,029,577.00	996,365.00	1,029,577.00	996,365.00
GUAJIRA 2	CARBON	8,760.00	1,156,984.00	1,156,984.00	1,045,018.00	1,156,984.00	1,119,662.00	1,156,984.00	1,119,662.00	1,156,984.00	1,156,984.00	1,119,662.00	1,156,984.00	1,119,662.00

Formato 17. Almacenamiento Combustible

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

Gestión Energética 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 (%)
PAIPA 1	31.00	11.7946	48.6867
PAIPA 2	70.00	12.2191	5.0376
PAIPA 3	70.00	12.2715	5.6740
PAIPA 4	150.00	9.2513	1.0958

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)
PAIPA 1	CARBON	8,760.00	139,587.00	139,587.00	126,079.00	139,587.00	135,085.00	139,587.00	135,085.00	139,587.00	139,587.00	135,085.00	139,587.00	135,085.00
PAIPA 2	CARBON	8,760.00	589,395.00	589,395.00	532,357.00	589,395.00	570,382.00	589,395.00	570,382.00	589,395.00	589,395.00	570,382.00	589,395.00	570,382.00
PAIPA 3	CARBON	8,760.00	602,837.00	602,837.00	544,498.00	602,837.00	583,390.00	602,837.00	583,390.00	602,837.00	602,837.00	583,390.00	602,837.00	583,390.00
PAIPA 4	CARBON	8,760.00	1,012,945.00	1,012,945.00	914,918.00	1,012,945.00	980,269.00	1,012,945.00	980,269.00	1,012,945.00	1,012,945.00	980,269.00	1,012,945.00	980,269.00

Formato 17. Almacenamiento Combustible

Planta	Combustible	Capacidad Almacenamiento	Cantidad Almacenada (MBTU)
PAIPA 1	CARBON	36,209.00	310,499.00
PAIPA 2	CARBON	81,762.00	701,127.00
PAIPA 3	CARBON	81,762.00	701,127.00
PAIPA 4	CARBON	89,000.00	1,188,022.00

Formato 18. Energía Contratada
Formato No Registrado

Formato 19. Plantas Menores
Formato No Registrado

Isagen S.A. E.S.P.

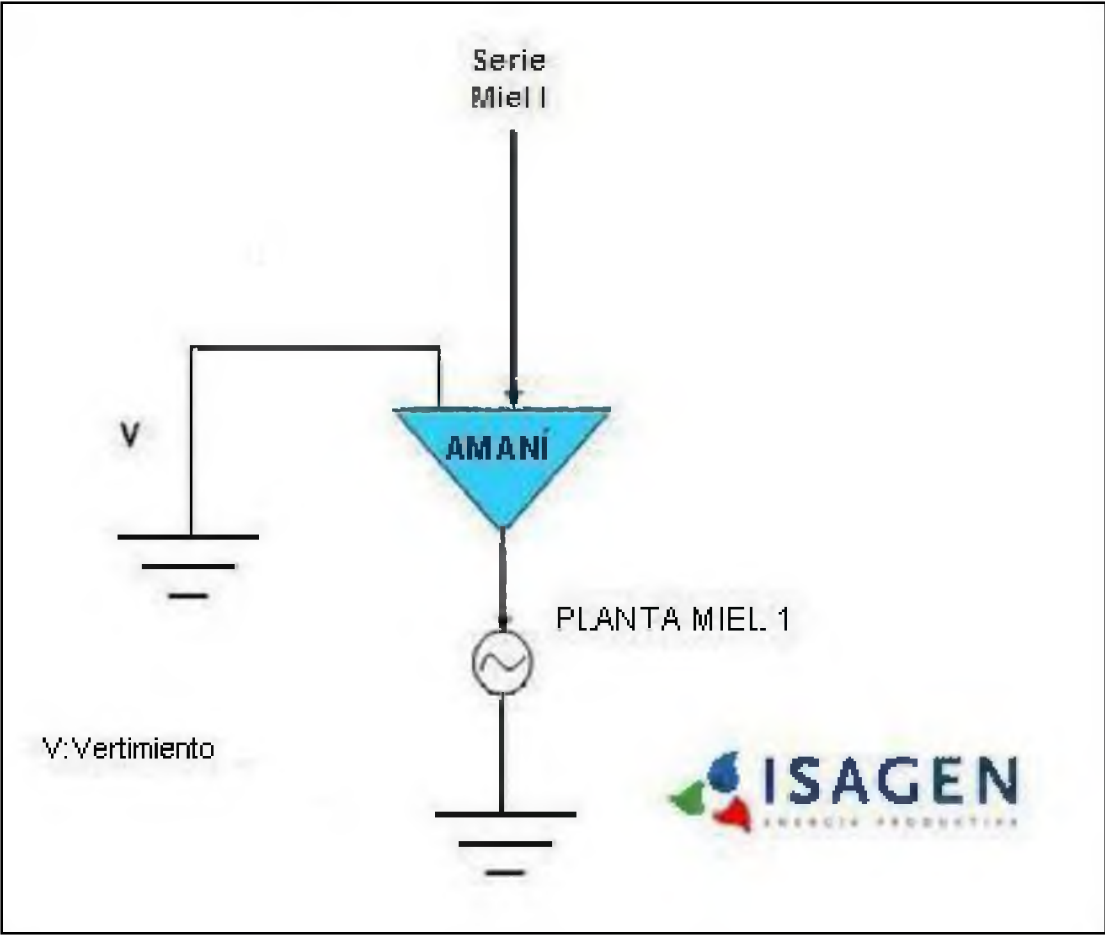
Formato 1. Plantas o Unidades Hidráulicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MW/m3/s)	IHF (%)
Jaguas	170.00	2.5684	7.8332
Miel I	396.00	1.8637	16.9455
San Carlos	1,240.00	5.4844	7.0839

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						
Miel I	E	Amani	Serie Miel I						Miel I					Tierra
Miel I	P	Miel I		Amani			Tierra							
San Carlos	E	Punchina	Serie San Carlos+Men or Calderas	Vertimiento de Playas	Playas				San Carlos					Tierra
San Carlos	P	San Carlos		Punchina			Tierra							

Formato 2a. Diagramas Topología



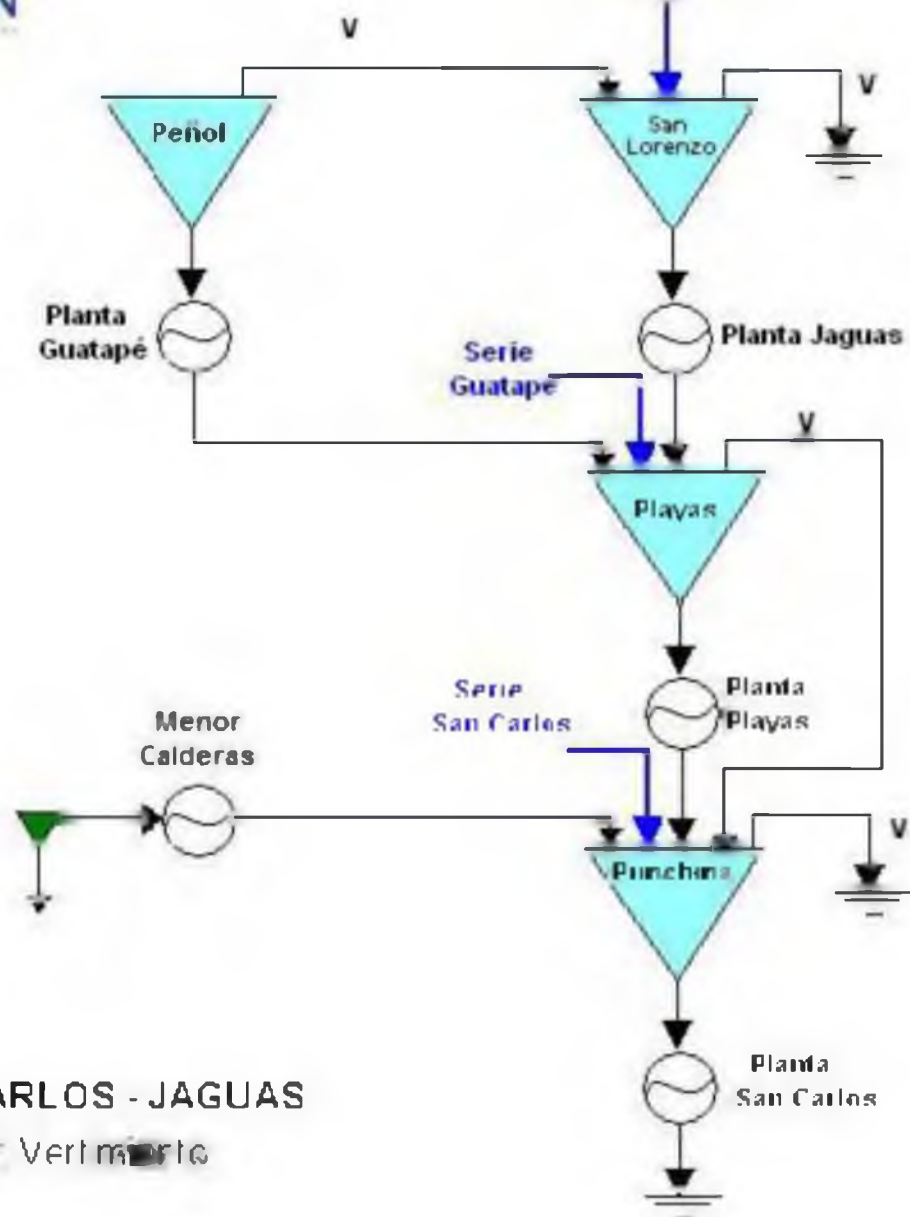
Formato 3. Plantas o Unidades Térmicas

Nombre	Capacidad Efectiva Neta (MW)	Eficiencia (MBTU/MWh)	IHF (%)
Termocentro Ciclo Combinado	280.02	7.0872	2.3597

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
San Lorenzo



SAN CARLOS - JAGUAS

V- Vermehrt

[illegible]

Menor Calderas	1991	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1992	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1993	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1994	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1995	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1996	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1997	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1998	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	1999	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2000	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2001	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2002	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2003	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2004	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2005	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2006	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2007	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Menor Calderas	2008	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Serie Miel I	1963	86.63	94.90	100.41	91.52	97.36	70.84	63.10	70.07	81.49	92.12	125.83	91.51
Serie Miel I	1964	74.24	85.74	72.57	90.19	95.82	95.82	76.67	91.88	97.80	90.88	89.02	93.18
Serie Miel I	1965	88.07	67.51	64.81	86.02	81.77	37.10	23.15	28.00	66.94	85.37	100.60	95.99
Serie Miel I	1966	65.68	67.37	65.72	56.97	78.35	87.05	60.35	62.49	75.72	95.02	107.87	152.74
Serie Miel I	1967	76.88	83.66	99.99	77.64	92.00	72.37	39.10	36.71	38.16	53.35	117.54	68.25
Serie Miel I	1968	66.46	79.96	71.70	129.38	85.27	80.28	48.61	39.02	73.50	105.07	95.94	110.72
Serie Miel I	1969	61.90	69.02	72.07	121.61	91.71	63.91	30.96	51.08	72.69	121.79	140.45	123.80
Serie Miel I	1970	77.67	94.81	59.73	101.95	119.20	74.16	57.55	69.66	79.98	120.16	200.70	192.92
Serie Miel I	1971	144.00	145.21	153.43	116.79	165.97	69.81	49.78	87.76	102.00	156.07	170.25	113.27
Serie Miel I	1972	87.82	71.72	62.25	53.95	153.88	87.73	45.41	64.99	60.79	84.76	109.43	56.90
Serie Miel I	1973	58.99	41.84	73.13	98.42	63.86	72.80	57.30	106.32	124.22	164.10	156.98	154.61
Serie Miel I	1974	89.65	122.14	79.65	92.10	100.85	52.59	29.36	42.00	74.71	120.73	189.26	93.53
Serie Miel I	1975	50.83	86.47	80.66	93.15	137.40	91.53	98.81	62.49	115.02	125.75	169.92	131.78
Serie Miel I	1976	112.30	94.94	102.01	106.20	90.78	50.65	24.86	21.82	20.75	78.40	80.25	48.23
Serie Miel I	1977	41.99	54.33	62.12	57.92	71.07	69.29	47.28	50.43	45.36	108.97	103.48	80.39

Serie Miel I	1978	49.60	35.40	79.04	144.17	110.41	79.73	75.78	37.12	68.23	132.37	115.56	109.00
Serie Miel I	1979	61.49	74.91	87.16	118.76	78.53	71.45	34.34	69.77	111.89	95.87	134.45	61.36
Serie Miel I	1980	77.71	66.67	52.39	53.51	98.98	61.76	33.72	30.72	56.31	102.54	172.41	126.18
Serie Miel I	1981	79.43	127.89	89.37	101.22	128.46	107.77	61.77	57.67	88.22	103.02	172.99	154.24
Serie Miel I	1982	66.14	61.86	81.59	92.37	120.48	59.83	29.72	22.01	27.26	85.27	91.73	78.15
Serie Miel I	1983	48.85	32.28	50.20	88.94	111.84	102.25	68.95	55.95	79.36	95.08	101.48	107.73
Serie Miel I	1984	117.90	135.77	113.13	109.92	122.69	109.90	109.96	85.96	125.05	164.08	180.34	144.07
Serie Miel I	1985	63.43	36.09	55.80	87.01	77.80	45.94	28.43	40.91	54.87	104.60	132.44	144.79
Serie Miel I	1986	106.29	77.24	87.16	101.86	104.38	56.68	26.77	28.28	31.72	122.43	106.62	63.89
Serie Miel I	1987	64.17	61.23	39.37	66.23	89.98	47.43	45.21	59.22	49.28	94.62	88.90	65.54
Serie Miel I	1988	63.62	56.18	39.71	97.45	75.68	99.57	42.88	70.77	109.64	129.67	144.98	143.04
Serie Miel I	1989	125.08	94.60	112.97	77.01	75.05	64.18	41.89	40.46	87.26	112.57	128.23	86.25
Serie Miel I	1990	77.20	61.34	58.43	97.07	58.45	35.71	35.21	30.02	31.42	126.90	101.43	97.36
Serie Miel I	1991	61.47	53.07	54.58	64.36	88.30	66.97	28.70	27.31	33.48	58.29	103.77	113.14
Serie Miel I	1992	67.78	48.46	45.07	46.88	104.38	50.32	19.49	22.79	43.07	38.77	73.20	96.13
Serie Miel I	1993	84.74	88.21	71.76	73.50	94.62	35.57	23.62	26.41	68.84	45.75	93.82	88.11
Serie Miel I	1994	90.88	112.73	144.18	94.61	81.33	42.27	29.71	30.83	36.14	50.88	97.19	89.60
Serie Miel I	1995	50.25	35.76	63.03	83.52	108.72	79.62	41.30	62.98	65.19	77.88	71.61	107.88
Serie Miel I	1996	110.17	67.97	83.84	84.62	120.41	70.28	49.86	50.39	56.60	66.04	70.72	87.28
Serie Miel I	1997	55.22	73.11	69.47	81.57	55.87	41.44	27.64	17.83	54.95	64.98	75.12	59.77
Serie Miel I	1998	73.07	91.79	73.33	94.12	80.68	36.91	36.34	53.80	73.46	83.39	110.93	96.34
Serie Miel I	1999	98.25	158.38	141.77	106.32	92.56	83.88	54.94	48.72	84.65	119.36	127.61	187.96
Serie Miel I	2000	88.13	105.57	140.56	116.51	100.16	93.01	54.06	51.45	84.89	79.76	133.05	92.42
Serie Miel I	2001	98.37	58.49	67.04	58.41	93.19	62.73	45.64	22.53	41.39	73.26	126.56	140.56
Serie Miel I	2002	102.50	80.96	67.33	121.81	71.49	69.24	34.59	22.62	45.94	86.03	69.41	86.30
Serie Miel I	2003	48.71	48.26	64.66	76.05	68.56	62.74	35.12	30.75	66.63	135.93	127.15	99.65
Serie Miel I	2004	74.21	67.46	87.59	118.23	109.53	47.27	43.72	26.45	54.43	77.10	113.13	116.29
Serie Miel I	2005	114.81	127.12	95.37	79.42	135.52	98.63	54.80	35.91	46.97	127.62	173.11	178.49
Serie Miel I	2006	133.31	114.94	122.78	116.19	114.76	88.99	37.53	30.50	58.07	99.85	143.67	135.50
Serie Miel I	2007	149.95	54.04	82.56	133.96	140.24	64.21	48.11	47.48	64.52	116.97	180.42	141.41
Serie Miel I	2008	111.42	107.48	130.31	107.08	135.42	90.63	61.85	95.05	82.03	111.86	199.37	145.09
Serie San Carlos	1964									24.81	33.34	36.73	21.06
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)
Amani	50.65	495.63
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
Miel I	17.00	220.00
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

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)
Termocentro Cielo Combinado	Cusiana	8,760.00	263,500.00	263,500.00	238,000.00	263,500.00	255,000.00	263,500.00	255,000.00	263,500.00	263,500.00	255,000.00	263,500.00	255,000.00
Termocentro Cielo Combinado	Guajira1	8,760.00	1,488,000.00	1,488,000.00	1,344,000.00	1,488,000.00	1,440,000.00	1,488,000.00	1,440,000.00	1,488,000.00	1,488,000.00	1,440,000.00	1,488,000.00	1,440,000.00
Termocentro Cielo Combinado	Guajira2	8,760.00	77,500.00	77,500.00	70,000.00	77,500.00	75,000.00	77,500.00	75,000.00	77,500.00	77,500.00	75,000.00	77,500.00	75,000.00

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)
Termocentro Cielo Combinado	Ballena	Barrancabermeja	170,500.00	170,500.00	154,000.00	170,500.00	165,000.00	170,500.00	165,000.00	170,500.00	170,500.00	165,000.00	170,500.00	165,000.00

Termocentro Ciclo Combinado	Barrancaber meja	Brida salida conexion gasoducto troncal con ramal Termocentro 4 km al sur de Estacion Sebastopol	1,643,000.00	1,643,000.00	1,484,000.00	1,643,000.00	1,590,000.00	1,643,000.00	1,590,000.00	1,643,000.00	1,643,000.00	1,590,000.00	1,643,000.00	1,590,000.00
Termocentro Ciclo Combinado	Cusiana	Sebastopol TC	372,000.00	372,000.00	336,000.00	372,000.00	360,000.00	372,000.00	360,000.00	372,000.00	372,000.00	360,000.00	372,000.00	360,000.00

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 (%)
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	167.00	9.6010	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	GUAJIRA	8,760.00	1,147,000.00	1,147,000.00	1,036,000.00	1,147,000.00	1,110,000.00	1,147,000.00	1,110,000.00	1,147,000.00	1,147,000.00	1,110,000.00	1,147,000.00	1,110,000.00

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)
TERMOMERILECTRIC A	BARRANCABERMEJA	BARRANCABERMEJA	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
Formato No Registrado

Formato 17. Almacenamiento Combustible
Formato No Registrado

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	8.1684	3.8256

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)
PROELECT RICA	GUAJIRA	8,760.00	57,505.00	57,505.00	51,940.00	57,505.00	55,650.00	57,505.00	55,650.00	57,505.00	57,505.00	55,650.00	57,505.00	55,650.00
PROELECT RICA	LACRECIE NTE	8,760.00	434,000.00	434,000.00	392,000.00	434,000.00	420,000.00	434,000.00	420,000.00	434,000.00	434,000.00	420,000.00	434,000.00	420,000.00

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)
PROELECT RICA	BALLENAS	PROELECT RICA	57,505.00	57,505.00	51,940.00	57,505.00	55,650.00	57,505.00	55,650.00	57,505.00	57,505.00	55,650.00	57,505.00	55,650.00
PROELECT RICA	LACRECIE NTE	PROELECT RICA	434,000.00	434,000.00	392,000.00	434,000.00	420,000.00	434,000.00	420,000.00	434,000.00	434,000.00	420,000.00	434,000.00	420,000.00

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
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	10.5506	2.7413
TCD2	157.00	10.5016	18.2596

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 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 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 1 DIESEL	152.00	7.7126	6.5000
FLORES 1 GAS	160.00	7.3751	6.5000
FLORES 21 DIESEL	107.00	10.4444	10.0000
FLORES 21 GAS	112.00	10.0025	10.0000
FLORES 3 GAS	169.00	9.6022	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)
FLORES 1 GAS	GUAJIRA	5,760.00	536,521.00	536,521.00	484,600.00	536,521.00	519,214.00	536,521.00	519,214.00	536,521.00	536,521.00	519,214.00	536,521.00	519,214.00
FLORES 3 GAS	GUAJIRA	8,760.00	1,076,099.00	1,076,099.00	971,960.00	1,076,099.00	1,041,386.00	1,076,099.00	1,041,386.00	1,076,099.00	1,076,099.00	1,041,386.00	1,076,099.00	1,041,386.00

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)
FLORES 1 GAS	ESTACION BALLENA	ESTACION TERMOFLORES	691,022.00	691,022.00	624,148.00	691,022.00	668,731.00	691,022.00	668,731.00	691,022.00	691,022.00	668,731.00	691,022.00	668,731.00
FLORES 3 GAS	ESTACION BALLENA	ESTACION TERMOFLORES	1,385,978.00	1,385,978.00	1,251,852.00	1,385,978.00	1,341,269.00	1,385,978.00	1,341,269.00	1,385,978.00	1,385,978.00	1,341,269.00	1,385,978.00	1,341,269.00

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)
FLORES 1 DIESEL	DIESEL	3,000.00	285,573.00	285,573.00	257,937.00	285,573.00	276,361.00	285,573.00	276,361.00	285,573.00	285,573.00	276,361.00	285,573.00	276,361.00
FLORES 21 DIESEL	DIESEL	8,760.00	831,458.00	831,458.00	750,994.00	831,458.00	804,637.00	831,458.00	804,637.00	831,458.00	831,458.00	804,637.00	831,458.00	804,637.00

Formato 17. Almacenamiento Combustible

Planta	Combustible	Capacidad Almacenamiento	Cantidad Almacenada (MBTU)
FLORES 1 DIESEL	DIESEL	10,162.39	0.00
FLORES 21 DIESEL	DIESEL	42,474.15	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	0.8731

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	793,569.76	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24	654,837.24

Formato 17. Almacenamiento Combustible

Planta	Combustible	Capacidad Almacenamiento	Cantidad Almacenada (MBTU)
Tasajero I	CARBON	178,384.22	4,836,138.00

Formato 18. Energía Contratada
Formato No Registrado

Formato 19. Plantas Menores
Formato No Registrado

Termoyopal Generación 2 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 (%)
TERMOYOPALG2	29.68	12.1016	10.0000

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)
TERMOYO PALG2	FLOREÑA(Boca de Pozo)	8,760.00	277,016.00	277,016.00	250,208.00	277,016.00	268,080.00	277,016.00	268,080.00	277,016.00	277,016.00	268,080.00	277,016.00	268,080.00

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)
TERMOYO PALG2	FLOREÑA(Boca de Pozo)	FLOREÑA(Boca de Pozo)	277,016.00	277,016.00	250,208.00	277,016.00	268,080.00	277,016.00	268,080.00	277,016.00	277,016.00	268,080.00	277,016.00	268,080.00

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 (%)
TERMOYOPALG1	19.90	70.00