
 * EL POTENCIAL TEORICO TOTAL DEL RIO PAMPAS ES DE 4403.3 MW *
 * Y TIENE UNA LONGITUD ACUMULADA DE 1446.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 3.05 MW/KM *

POTENCIAL TEORICO DEL RIO PAMPAS 2/14/79

I	L	H	Q	AFQ	DL	DM	PE	QC	POT	ESP	CUM
=====											
AFLUENTE PALMITOS											
1	34.0	4850.0	0.0	0.0	4.0	385.0	9.62	0.04	0.15	0.04	0.00
2	30.0	4465.0	0.1	0.0	10.0	275.0	2.75	0.31	0.84	0.08	0.15
3	20.0	4190.0	0.6	0.0	10.0	140.0	1.40	1.12	1.54	0.15	0.99
4	10.0	4050.0	1.7	0.0	10.0	360.0	3.60	1.86	6.56	0.66	2.54
5	0.0	3690.0	2.0	0.0							9.10
SUBTOTAL					34.0	1160.0			9.10	0.27	
=====											
AFLUENTE SECO											
6	32.0	4435.0	0.1	0.0	2.0	40.0	2.00	0.17	0.07	0.03	0.00
7	30.0	4395.0	0.2	0.0	10.0	235.0	2.35	0.53	1.23	0.12	0.07
8	20.0	4160.0	0.9	0.0	10.0	230.0	2.30	1.27	2.86	0.29	1.30
9	10.0	3930.0	1.7	0.0	10.0	455.0	4.55	1.89	8.44	0.84	4.16
10	0.0	3475.0	2.1	0.0							12.59
SUBTOTAL					32.0	960.0			12.59	0.39	
=====											
AFLUENTE CHALHUAMAYO											
11	41.0	4510.0	0.0	0.0	6.0	265.0	4.42	0.16	0.42	0.07	0.00
12	35.0	4045.0	0.3	0.0	10.0	220.0	2.20	0.68	1.46	0.15	0.42
13	25.0	3825.0	1.0	0.0	10.0	155.0	1.55	2.18	3.32	0.33	1.88
14	15.0	3670.0	3.3	0.0	10.0	195.0	1.95	4.01	7.67	0.77	5.20
15	5.0	3475.0	4.7	2.1	5.0	125.0	2.50	6.92	8.49	1.70	12.87
16	0.0	3350.0	7.0	0.0							21.36
SUBTOTAL					41.0	960.0			21.36	0.52	
=====											
AFLUENTE ALPACANCHA											
17	42.0	4450.0	0.0	0.0	2.0	35.0	1.75	0.03	0.01	0.01	0.00
18	40.0	4415.0	0.1	0.0	10.0	110.0	1.10	0.50	0.54	0.05	0.01
19	30.0	4305.0	0.9	0.0	10.0	315.0	3.15	1.20	3.71	0.37	0.55
20	20.0	3990.0	1.5	0.0	10.0	430.0	4.30	1.77	7.49	0.75	4.26
21	10.0	3560.0	2.1	0.0	10.0	275.0	2.75	2.77	7.46	0.75	11.74
22	0.0	3285.0	3.4	0.0							19.20
SUBTOTAL					42.0	1165.0			19.20	0.46	
=====											
AFLUENTE URABAMBA											
23	60.0	4200.0	0.0	0.0	10.0	155.0	1.55	0.16	0.25	0.02	0.00
24	50.0	4045.0	0.3	0.0	10.0	105.0	1.05	1.65	1.70	0.17	0.25
25	40.0	3940.0	3.0	0.0	10.0	25.0	0.25	3.46	0.85	0.08	1.94
26	30.0	3915.0	3.9	0.0	10.0	11.0	0.11	5.13	0.55	0.06	2.79
27	20.0	3904.0	6.3	0.0	10.0	49.0	0.49	7.96	3.82	0.38	3.35
28	10.0	3855.0	9.6	0.0	10.0	355.0	3.55	9.82	34.21	3.42	7.17
29	0.0	3500.0	10.1	0.0							41.38
SUBTOTAL					60.0	700.0			41.38	0.69	
=====											

POTENCIAL TEORICO DEL RIO PAMPAS

2/14/79

I	L	H	Q	AFG	DL	DM	PE	QC	POT	ESP	CUM
=====											
AFLUENTE LUCANAMARCA											
30	40.0	4500.0	0.0	0.0	10.0	475.0	4.75	0.31	1.46	0.15	0.00
31	30.0	4025.0	0.6	0.0	10.0	195.0	1.95	1.00	1.91	0.19	1.46
32	20.0	3830.0	1.4	0.0	10.0	380.0	3.80	3.03	11.29	1.13	3.37
33	10.0	3450.0	4.7	0.0	10.0	395.0	3.95	5.49	21.27	2.13	14.66
34	0.0	3055.0	6.3	0.0							35.93
SUBTOTAL					40.0	1445.0			35.93	0.90	
=====											
AFLUENTE CARACHA SUPE											
35	110.0	4300.0	0.0	0.0	10.0	280.0	2.80	0.16	0.45	0.04	0.00
36	100.0	4020.0	0.3	0.0	10.0	80.0	0.80	0.76	0.60	0.06	0.45
37	90.0	3940.0	1.2	0.0	10.0	50.0	0.50	1.65	0.81	0.08	1.05
38	80.0	3890.0	2.1	0.0	10.0	20.0	0.20	3.36	0.66	0.07	1.86
39	70.0	3870.0	4.6	0.0	10.0	18.0	0.18	4.86	0.86	0.09	2.51
40	60.0	3852.0	5.1	0.0							3.37
SUBTOTAL					50.0	448.0			3.37	0.07	
=====											
AFLUENTE CARACHA INFE											
40	60.0	3852.0	5.1	0.0	10.0	352.0	3.52	5.43	18.76	1.88	0.00
41	50.0	3500.0	5.8	10.1	10.0	325.0	3.25	17.36	55.35	5.53	18.76
42	40.0	3175.0	18.9	0.0	10.0	120.0	1.20	19.51	22.96	2.30	74.10
43	30.0	3055.0	20.1	6.3	10.0	185.0	1.85	28.64	51.97	5.20	97.07
44	20.0	2870.0	30.9	0.0	10.0	122.0	1.22	32.20	38.54	3.85	149.04
45	10.0	2748.0	33.5	0.0	10.0	123.0	1.23	33.90	40.91	4.09	187.59
46	0.0	2625.0	34.3	0.0							228.49
SUBTOTAL					60.0	1227.0			228.49	3.81	
=====											
AFLUENTE HUANCAPI											
47	42.0	4350.0	0.1	0.0	2.0	105.0	5.25	0.11	0.11	0.06	0.00
48	40.0	4245.0	0.2	0.0	10.0	365.0	3.65	0.45	1.60	0.16	0.11
49	30.0	3880.0	0.7	0.0	10.0	350.0	3.50	1.06	3.63	0.36	1.72
50	20.0	3530.0	1.4	0.0	10.0	480.0	4.80	1.88	8.85	0.89	5.35
51	10.0	3050.0	2.4	0.0	10.0	560.0	5.60	2.53	13.91	1.39	14.20
52	0.0	2490.0	2.7	0.0							28.12
SUBTOTAL					42.0	1860.0			28.12	0.67	
=====											
AFLUENTE VISCHONGO											
53	54.0	4048.0	0.0	0.0	4.0	198.0	4.95	0.07	0.14	0.04	0.00
54	50.0	3850.0	0.1	0.0	10.0	330.0	3.30	0.32	1.02	0.10	0.14
55	40.0	3520.0	0.5	0.0	10.0	225.0	2.25	1.16	2.57	0.26	1.16
56	30.0	3295.0	1.8	0.0	10.0	40.0	0.40	3.86	1.52	0.15	3.73
57	20.0	3255.0	5.9	0.0	10.0	265.0	2.65	6.65	17.30	1.73	5.25
58	10.0	2990.0	7.4	0.0	10.0	530.0	5.30	8.36	43.46	4.35	22.54
59	0.0	2460.0	9.3	0.0							66.01
SUBTOTAL					54.0	1588.0			66.01	1.22	
=====											
AFLUENTE NEGROMAYO											
60	56.0	4350.0	0.0	0.0	6.0	125.0	2.08	0.10	0.12	0.02	0.00
61	50.0	4225.0	0.2	0.0	4.0	70.0	1.75	0.26	0.18	0.04	0.12
62	46.0	4155.0	0.3	0.0	10.0	35.0	0.35	0.66	0.23	0.02	0.30
63	36.0	4120.0	1.0	0.0	10.0	50.0	0.50	1.50	0.73	0.07	0.52
64	26.0	4070.0	2.0	0.0	10.0	170.0	1.70	2.18	3.63	0.36	1.18
65	16.0	3900.0	2.4	0.0	10.0	625.0	6.25	3.31	20.28	2.03	3.78
66	6.0	3275.0	4.3	0.0	6.0	245.0	4.08	4.39	10.54	1.76	5.54
67	0.0	3030.0	4.5	0.0							35.72
SUBTOTAL					56.0	1320.0			35.72	0.64	

POTENCIAL TEORICO DEL RIO PAMPAS

2/14/79

I	L	H	W	AFO	DL	DH	PE	GC	POT	ESP	CUM
=====											
AFLUENTE PANCOY											
68	41.0	4450.0	0.0	0.0	11.0	302.0	2.75	0.10	0.29	0.03	0.00
69	30.0	4148.0	0.2	0.0	10.0	775.0	7.73	1.07	8.10	0.81	0.29
70	20.0	3375.0	1.9	0.0	10.0	350.0	3.50	2.42	8.52	0.83	8.39
71	10.0	3025.0	2.9	0.0	10.0	325.0	3.25	5.32	10.58	1.06	16.71
72	0.0	2700.0	3.7	0.0							27.29
SUBTOTAL					41.0	1750.0			27.29	0.67	
=====											
AFLUENTE HUANCARAMA											
73	40.0	4375.0	0.0	0.0	10.0	250.0	2.50	0.12	0.30	0.03	0.00
74	30.0	4125.0	0.2	0.0	10.0	275.0	2.75	0.37	1.00	0.10	0.30
75	20.0	3850.0	0.5	0.0	10.0	295.0	2.95	0.76	2.19	0.22	1.30
76	10.0	3555.0	1.0	0.0	10.0	1120.0	11.20	1.43	15.70	1.57	3.49
77	0.0	2435.0	1.9	0.0							19.19
SUBTOTAL					40.0	1940.0			19.19	0.48	
=====											
AFLUENTE SONDONDO SUP											
78	114.0	4385.0	0.1	0.0	10.0	70.0	0.70	0.55	0.24	0.02	0.00
79	104.0	4315.0	0.6	0.0	10.0	190.0	1.90	1.09	2.03	0.20	0.24
80	94.0	4125.0	1.6	0.0	10.0	175.0	1.75	2.22	3.82	0.38	2.28
81	84.0	3950.0	2.8	0.0	8.0	300.0	3.75	4.81	14.15	1.77	6.09
82	76.0	3650.0	6.8	0.0	12.0	415.0	3.46	7.11	28.96	2.41	20.25
83	64.0	3235.0	7.4	0.0	10.0	205.0	2.05	8.06	16.22	1.62	49.21
84	54.0	3050.0	8.7	4.5	7.0	130.0	1.86	13.40	17.09	2.44	65.43
85	47.0	2900.0	13.6	0.0							82.52
SUBTOTAL					67.0	1485.0			82.52	1.23	
=====											
AFLUENTE SONDONDO INF											
85	47.0	2900.0	13.6	0.0	7.0	200.0	2.86	14.67	28.79	4.11	0.00
86	40.0	2700.0	15.7	3.7	10.0	125.0	1.25	20.54	25.19	2.52	28.79
87	30.0	2575.0	21.6	0.0	10.0	60.0	0.60	22.78	13.41	1.34	53.98
88	20.0	2515.0	23.9	0.0	10.0	80.0	0.80	24.38	19.14	1.91	67.39
89	10.0	2435.0	24.8	1.9	10.0	160.0	1.60	28.08	44.08	4.41	86.53
90	0.0	2275.0	29.5	0.0							130.61
SUBTOTAL					47.0	625.0			130.61	2.78	
=====											
AFLUENTE YANAMAYU											
91	30.0	4260.0	0.2	0.0	10.0	315.0	3.15	0.41	1.25	0.13	0.00
92	20.0	3945.0	0.6	0.0	10.0	250.0	2.50	0.82	2.00	0.20	1.25
93	10.0	3695.0	1.1	0.0	10.0	215.0	2.15	1.31	2.76	0.28	3.26
94	0.0	3480.0	1.6	0.0							6.02
SUBTOTAL					30.0	780.0			6.02	0.20	
=====											

POTENCIAL TEORICO DEL RIO PAMPAS

2/14/79

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE PAUCHE											
95	40.0	4230.0	0.0	0.0	10.0	265.0	2.65	0.53	1.37	0.14	0.00
96	30.0	3965.0	1.0	0.0	10.0	195.0	1.95	1.71	3.27	0.33	1.37
97	20.0	3770.0	2.4	0.0	10.0	495.0	4.95	3.21	15.60	1.56	4.64
98	10.0	3275.0	4.0	0.0	10.0	665.0	6.65	4.28	27.90	2.79	20.25
99	0.0	2610.0	4.5	0.0							48.15
SUBTOTAL					40.0	1620.0			48.15	1.20	
=====											
AFLUENTE SORAS											
100	107.0	4450.0	0.0	0.0	10.0	370.0	3.70	0.29	1.07	0.11	0.00
101	97.0	4080.0	0.6	0.0	10.0	228.0	2.28	1.33	2.98	0.30	1.07
102	87.0	3852.0	2.1	0.0	10.0	207.0	2.07	2.42	4.92	0.49	4.05
103	77.0	3645.0	2.8	0.0	10.0	165.0	1.65	3.23	5.23	0.52	8.97
104	67.0	3480.0	3.7	1.6	10.0	280.0	2.80	6.82	18.74	1.87	14.20
105	57.0	3200.0	8.4	0.0	10.0	245.0	2.45	12.64	30.39	3.04	32.94
106	47.0	2955.0	16.9	0.0	7.0	345.0	4.93	17.53	59.34	8.48	63.33
107	40.0	2610.0	18.2	4.5	10.0	140.0	1.40	25.72	35.32	3.53	122.67
108	30.0	2470.0	28.7	0.0	10.0	115.0	1.15	29.61	33.40	3.34	157.99
109	20.0	2355.0	30.5	0.0	10.0	95.0	0.95	32.52	30.30	3.03	191.39
110	10.0	2260.0	34.6	0.0	10.0	125.0	1.25	34.90	42.79	4.28	221.69
111	0.0	2135.0	35.2	0.0							264.48
SUBTOTAL					107.0	2315.0			264.48	2.47	
=====											
AFLUENTE HUANCARAY											
112	48.0	4210.0	0.1	0.0	8.0	480.0	6.00	0.46	2.17	0.27	0.00
113	40.0	3730.0	0.8	0.0	10.0	360.0	3.60	1.72	6.09	0.61	2.17
114	30.0	3370.0	2.6	0.0	10.0	400.0	4.00	3.55	13.92	1.39	8.26
115	20.0	2970.0	4.5	0.0	10.0	410.0	4.10	5.48	22.05	2.21	22.18
116	10.0	2560.0	6.5	0.0	10.0	470.0	4.70	8.26	38.08	3.81	44.23
117	0.0	2090.0	10.0	0.0							82.31
SUBTOTAL					48.0	2120.0			82.31	1.71	
=====											
AFLUENTE TOROBAMBA											
118	52.0	3870.0	0.7	0.0	12.0	970.0	8.08	1.75	16.62	1.39	0.00
119	40.0	2900.0	2.8	0.0	10.0	320.0	3.20	3.76	11.82	1.18	16.62
120	30.0	2580.0	4.7	0.0	10.0	335.0	3.35	5.66	18.60	1.86	28.44
121	20.0	2245.0	6.6	0.0	10.0	415.0	4.15	7.62	31.02	3.10	47.04
122	10.0	1830.0	8.6	0.0	10.0	260.0	2.60	8.91	22.73	2.27	78.06
123	0.0	1570.0	9.2	0.0							100.78
SUBTOTAL					52.0	2300.0			100.78	1.94	
=====											
AFLUENTE CHUMBAO											
124	60.0	4260.0	0.1	0.0	10.0	540.0	5.40	0.44	2.35	0.23	0.00
125	50.0	3720.0	0.8	0.0	10.0	670.0	6.70	1.07	7.04	0.70	2.35
126	40.0	3050.0	1.4	0.0	10.0	260.0	2.60	3.12	7.95	0.79	9.39
127	30.0	2790.0	4.8	0.0	10.0	380.0	3.80	5.97	22.26	2.23	17.33
128	20.0	2410.0	7.1	0.0	10.0	500.0	5.00	7.54	36.99	3.70	39.59
129	10.0	1910.0	8.0	0.0	10.0	635.0	6.35	8.25	51.40	5.14	76.59
130	0.0	1275.0	8.5	0.0							127.99
SUBTOTAL					60.0	2985.0			127.99	2.13	
=====											

POTENCIAL TEORICO DEL RIO PAMPAS

2/14/79

=====

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
---	---	---	---	-----	----	----	----	----	-----	-----	-----

=====

AFLUENTE PAMPAS SUPER

131	403.0	4529.0	1.3	0.0	5.0	204.0	4.08	1.46	2.93	0.59	0.00
132	398.0	4325.0	1.6	0.0	10.0	275.0	2.75	2.57	6.94	0.69	2.93
133	388.0	4050.0	3.5	0.0	10.0	155.0	1.55	1.78	2.71	0.27	9.87
134	378.0	3895.0	0.0	0.0	10.0	205.0	2.05	0.24	0.48	0.05	12.58
135	368.0	3690.0	0.5	2.0	10.0	165.0	1.65	2.78	4.50	0.45	13.07
136	358.0	3525.0	3.1	0.0	10.0	175.0	1.75	3.83	6.58	0.66	17.56
137	348.0	3350.0	4.6	7.0	6.0	65.0	1.08	12.27	7.83	1.30	24.14
138	342.0	3285.0	12.9	3.4	7.0	70.0	1.00	16.95	11.64	1.66	31.97
139	335.0	3215.0	17.5	0.0	10.0	125.0	1.25	18.51	22.70	2.27	43.61
140	325.0	3090.0	19.5	0.0	10.0	130.0	1.30	20.19	25.75	2.58	66.31
141	315.0	2960.0	20.9	0.0	10.0	95.0	0.95	21.78	20.30	2.03	92.06
142	305.0	2865.0	22.7	0.0	10.0	165.0	1.65	23.68	38.33	3.83	112.36
143	295.0	2700.0	24.7	0.0	10.0	75.0	0.75	25.34	18.64	1.86	150.69
144	285.0	2625.0	26.0	34.3	7.0	45.0	0.64	60.60	26.75	3.82	169.33
145	278.0	2580.0	61.0	0.0	10.0	35.0	0.35	62.57	21.48	2.15	196.08
146	268.0	2545.0	64.2	0.0	10.0	55.0	0.55	66.35	35.80	3.58	217.56
147	258.0	2490.0	68.5	2.7	9.0	30.0	0.33	71.64	21.08	2.34	253.36
148	249.0	2460.0	72.1	9.3	6.0	25.0	0.42	81.61	20.02	3.34	274.44
149	243.0	2435.0	81.8	0.0	10.0	30.0	0.30	82.65	24.32	2.43	294.46
150	233.0	2405.0	83.5	0.0	11.0	107.0	0.97	84.47	88.67	8.06	318.78
151	222.0	2298.0	85.5	0.0	9.0	23.0	0.26	86.13	19.43	2.16	407.45
152	213.0	2275.0	86.8	29.5	9.0	40.0	0.44	116.70	45.79	5.09	426.88
153	204.0	2235.0	117.1	0.0	11.0	70.0	0.64	118.71	81.52	7.41	472.68
154	193.0	2165.0	120.3	0.0	8.0	30.0	0.37	120.77	35.54	4.44	554.20
155	185.0	2135.0	121.2	35.2	11.0	45.0	0.41	157.15	69.38	6.31	589.74
156	174.0	2090.0	157.8	10.0	12.0	60.0	0.50	169.10	99.53	8.29	659.11
157	162.0	2030.0	170.3	0.0	10.0	45.0	0.45	171.47	75.69	7.57	758.64
158	152.0	1985.0	172.6	0.0	10.0	15.0	0.15	173.36	25.51	2.55	834.34
159	142.0	1970.0	174.1	0.0	13.0	50.0	0.38	177.06	86.85	6.68	859.85
160	129.0	1920.0	180.0	0.0							946.70
SUBTOTAL					274.0	2609.0			946.70	3.46	

AFLUENTE PAMPAS INFER

160	129.0	1920.0	180.0	0.0	8.0	105.0	1.31	181.91	187.38	23.42	0.00
161	121.0	1815.0	183.8	0.0	10.0	105.0	1.05	185.27	190.84	19.08	187.38
162	111.0	1710.0	186.7	0.0	10.0	80.0	0.80	188.20	147.70	14.77	378.22
163	101.0	1630.0	189.7	0.0	10.0	60.0	0.60	190.24	111.98	11.20	525.92
164	91.0	1570.0	190.8	9.2	13.0	95.0	0.73	201.29	187.59	14.43	637.90
165	78.0	1475.0	202.6	0.0	10.0	60.0	0.60	203.41	119.73	11.97	825.49
166	68.0	1415.0	204.2	0.0	10.0	45.0	0.45	205.68	90.80	9.08	945.21
167	58.0	1370.0	207.1	0.0	10.0	80.0	0.80	209.13	164.13	16.41	1036.01
168	48.0	1290.0	211.1	0.0	7.0	90.0	1.29	213.48	188.48	26.93	1200.14
169	41.0	1200.0	215.8	0.0	6.0	20.0	0.33	216.64	42.50	7.08	1388.62
170	35.0	1180.0	217.5	8.5	10.0	10.0	0.10	227.39	22.31	2.23	1431.12
171	25.0	1170.0	228.8	0.0	10.0	20.0	0.20	229.55	45.04	4.50	1453.43
172	15.0	1150.0	230.3	0.0	10.0	214.0	2.14	232.48	488.05	48.80	1498.47
173	5.0	936.0	234.7	0.0	5.0	34.0	0.68	238.23	79.46	15.89	1986.52
174	0.0	902.0	241.8	0.0							2065.98
SUBTOTAL					129.0	1018.0			2065.98	16.02	

 * EL POTENCIAL TEORICO TOTAL DEL RIO MANTARO SUP ES DE 683.0 MW *
 * Y TIENE UNA LONGITUD ACUMULADA DE 917.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 0.74 MW/KM *

POTENCIAL TEORICO DEL RIO MANTARO SUP 2/14/79

I	L	H	Q	AFQ	DL	DM	PE	QC	POT	ESP	CUM
AFLUENTE GASUAN											
1	25.0	4399.0	0.0	0.0	15.0	139.0	0.93	0.59	0.80	0.05	0.00
2	10.0	4260.0	1.2	0.0	10.0	79.0	0.79	1.33	1.03	0.10	0.80
3	0.0	4181.0	1.5	0.0							1.85
SUBTOTAL					25.0	218.0			1.83	0.07	
AFLUENTE HUARUPAMPA											
4	26.0	4481.0	0.0	0.0	16.0	234.0	1.46	0.57	1.30	0.08	0.00
5	10.0	4247.0	1.1	0.0	9.7	66.0	0.68	1.27	0.82	0.08	1.30
6	0.5	4181.0	1.4	1.5	0.5	1.0	0.55	2.91	0.03	0.10	2.12
7	0.0	4180.0	2.9	0.0							2.15
SUBTOTAL					26.0	301.0			2.15	0.08	
AFLUENTE BLANCO											
8	48.0	4550.0	0.1	0.0	16.0	230.0	1.44	0.71	1.61	0.10	0.00
9	32.0	4320.0	1.4	0.0	12.0	0.0	0.00	2.22	0.00	0.00	1.61
10	20.0	4320.0	3.1	0.0	10.0	99.0	0.99	3.22	3.12	0.51	1.61
11	10.0	4221.0	3.4	0.0	10.0	122.0	1.22	3.42	4.09	0.41	4.73
12	0.0	4099.0	3.5	0.0							8.82
SUBTOTAL					48.0	451.0			8.82	0.18	
AFLUENTE LAGO JUNIN											
13	32.0	4100.0	3.7	0.0	12.0	3.0	0.02	4.12	0.12	0.01	0.00
14	20.0	4097.0	4.5	0.0	10.0	3.0	0.03	6.14	0.18	0.02	0.12
15	10.0	4094.0	7.8	0.0	10.0	3.0	0.03	8.29	0.24	0.02	0.30
16	0.0	4091.0	8.8	0.0							0.55
SUBTOTAL					32.0	9.0			0.55	0.02	
AFLUENTE RACHANCANCHA											
17	27.0	4570.0	0.0	0.0	11.0	215.0	1.95	0.27	0.57	0.05	0.00
18	16.0	4355.0	0.5	0.0	10.0	205.0	2.05	0.40	0.81	0.08	0.57
19	6.0	4150.0	0.3	0.0	6.0	60.0	1.00	0.50	0.29	0.05	1.38
20	0.0	4090.0	0.7	0.0							1.67
SUBTOTAL					27.0	480.0			1.67	0.06	
AFLUENTE COLORADO SUP											
21	43.0	4800.0	0.0	0.0	13.0	350.0	2.69	0.60	2.07	0.16	0.00
22	30.0	4450.0	1.2	0.0	10.0	89.0	0.89	1.68	1.47	0.15	2.07
23	20.0	4361.0	2.2	0.0	10.0	181.0	1.81	1.88	3.34	0.33	3.54
24	10.0	4180.0	1.6	0.0	7.0	80.0	1.14	1.75	1.37	0.20	6.88
25	3.0	4100.0	1.9	0.0							8.25
SUBTOTAL					40.0	700.0			8.25	0.21	

POTENCIAL TEORICO DEL RIO MANTARO SUP 2/14/79

I	L	H	Q	AFQ	DL	DM	PE	QC	POT	ESP	CUM
=====											
AFLUENTE COLORADO INF											
25	3.0	4100.0	1.9	0.0							0.00
26	0.0	4078.0	1.9	0.0	3.0	22.0	0.73	1.91	0.41	0.14	0.41
SUBTOTAL					3.0	22.0			0.41	0.14	
=====											
AFLUENTE ANTICONA											
27	16.0	4500.0	0.0	0.0							0.00
28	10.0	4200.0	1.6	0.0	6.0	300.0	5.00	0.84	2.48	0.41	2.48
29	6.0	4125.0	2.3	0.0	4.0	75.0	1.87	1.97	1.45	0.36	3.93
SUBTOTAL					10.0	375.0			3.93	0.39	
=====											
AFLUENTE HUARON											
29	6.0	4125.0	2.3	0.0							0.00
30	0.0	4074.0	2.4	0.0	6.0	51.0	0.85	2.35	1.18	0.20	1.18
SUBTOTAL					6.0	51.0			1.18	0.20	
=====											
AFLUENTE TAMBO											
31	22.0	4690.0	0.0	0.0							0.00
32	10.0	4320.0	1.1	0.0	12.0	370.0	3.08	0.58	2.10	0.17	2.10
33	0.0	4240.0	2.1	0.0	10.0	80.0	0.80	1.63	1.28	0.13	3.38
SUBTOTAL					22.0	450.0			3.38	0.15	
=====											
AFLUENTE CASACANCHA											
34	24.0	4641.0	0.0	0.0							0.00
35	6.0	4200.0	3.7	0.0	18.0	441.0	2.45	1.88	8.15	0.45	8.15
36	0.0	4141.0	4.1	0.0	6.0	59.0	0.98	3.95	2.28	0.38	10.43
SUBTOTAL					24.0	500.0			10.43	0.43	
=====											
AFLUENTE CONOCANCHA A											
37	53.0	4750.0	0.0	0.0							0.00
38	42.0	4550.0	0.1	0.0	11.0	200.0	1.82	0.06	0.12	0.01	0.12
39	32.0	4460.0	1.1	0.0	10.0	90.0	0.90	0.63	0.56	0.06	0.68
40	23.0	4280.0	1.8	0.0	9.0	180.0	2.00	1.47	2.60	0.29	3.28
SUBTOTAL					30.0	470.0			3.28	0.11	
=====											
AFLUENTE CONOCANCHA B											
40	23.0	4280.0	1.8	0.0							0.00
41	22.0	4240.0	1.8	2.1	1.0	40.0	4.00	1.82	0.71	0.71	0.71
42	21.0	4200.0	3.5	0.0	1.0	40.0	4.00	3.73	1.46	1.46	2.18
SUBTOTAL					2.0	80.0			2.18	1.09	
=====											
AFLUENTE CONOCANCHA C											
42	21.0	4200.0	3.5	0.0							0.00
43	19.0	4141.0	3.6	4.1	2.0	59.0	2.95	3.53	2.04	1.02	2.04
44	18.0	4130.0	7.8	0.0	1.0	11.0	1.10	7.75	0.84	0.84	2.88
SUBTOTAL					3.0	70.0			2.88	0.96	
=====											

POTENCIAL TEORICO DEL RIO MANTARO SUP 2/14/79

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE CONOCANCHA D											
44	18.0	4130.0	7.8	0.0							0.00
45	16.0	4120.0	7.9	0.0	2.0	10.0	0.50	7.83	0.77	0.38	0.77
46	0.0	3952.0	8.6	0.0	16.0	168.0	1.05	8.24	13.59	0.85	14.36
SUBTOTAL					18.0	178.0			14.36	0.80	
=====											
AFLUENTE GASHA											
47	20.0	4640.0	0.0	0.0							0.00
48	10.0	4455.0	0.8	0.0	10.0	185.0	1.85	0.40	0.73	0.07	0.73
49	0.0	4194.0	0.8	0.0	10.0	261.0	2.61	0.81	2.06	0.21	2.79
SUBTOTAL					20.0	446.0			2.79	0.14	
=====											
AFLUENTE CORPACANCHA A											
50	47.0	4950.0	0.0	0.0							0.00
51	35.0	4295.0	1.6	0.0	12.0	655.0	5.46	0.80	5.13	0.33	5.13
52	25.0	4194.0	1.2	0.8	10.0	101.0	1.01	1.40	1.38	0.14	5.27
53	24.0	4185.0	2.1	0.0	1.0	9.0	0.90	2.06	0.18	0.18	5.45
SUBTOTAL					23.0	765.0			6.70	0.29	
=====											
AFLUENTE CORPACANCHA B											
53	24.0	4185.0	2.1	0.0							0.00
54	20.0	4161.0	2.4	0.0	4.0	24.0	0.60	2.23	0.53	0.13	0.53
55	10.0	4030.0	3.6	0.0	10.0	131.0	1.31	2.98	3.83	0.38	4.35
56	0.0	3891.0	4.1	0.0	10.0	139.0	1.39	3.85	5.25	0.53	9.61
SUBTOTAL					24.0	294.0			9.61	0.40	
=====											
AFLUENTE PUCAYAN											
57	27.0	4900.0	0.0	0.0							0.00
58	20.0	4446.0	0.3	0.0	7.0	454.0	6.49	0.15	0.66	0.09	0.66
59	10.0	4100.0	0.8	0.0	10.0	346.0	3.46	0.54	1.84	0.18	2.49
60	0.0	3860.0	1.1	0.0	10.0	240.0	2.40	0.96	2.25	0.23	4.74
SUBTOTAL					27.0	1040.0			4.74	0.16	
=====											
AFLUENTE ATOCHUARCO A											
61	27.0	4260.0	0.0	0.0							0.00
62	10.0	3960.0	1.1	0.0	17.0	300.0	1.76	0.54	1.59	0.09	1.59
63	1.0	3790.0	2.2	0.0	9.0	170.0	1.89	1.64	2.73	0.30	4.32
SUBTOTAL					26.0	470.0			4.32	0.17	
=====											
AFLUENTE ATOCHUARCO B											
63	1.0	3790.0	2.2	0.0							0.00
64	0.0	3750.0	2.2	0.0	1.0	40.0	4.00	2.21	0.87	0.87	0.87
SUBTOTAL					1.0	40.0			0.87	0.87	
=====											
AFLUENTE PUCARA SUP											
65	18.0	4600.0	0.0	0.0							0.00
66	13.0	4550.0	0.2	0.0	5.0	50.0	1.00	0.09	0.04	0.01	0.04
67	3.0	4197.0	0.4	0.0	10.0	353.0	3.53	0.28	0.48	0.10	1.03
SUBTOTAL					15.0	403.0			1.03	0.07	
=====											
AFLUENTE PUCARA INF											
67	3.0	4197.0	0.4	0.0							0.00
68	0.0	3972.0	0.6	0.0	3.0	225.0	7.50	0.48	1.07	0.36	1.07
SUBTOTAL					3.0	225.0			1.07	0.36	
=====											
AFLUENTE YAULI A											
69	55.0	4800.0	0.6	0.0							0.00
70	41.0	4290.0	0.8	0.0	14.0	510.0	3.64	0.69	3.44	0.25	3.44
71	30.0	4100.0	2.4	0.0	11.0	190.0	1.73	1.58	2.95	0.27	6.39
SUBTOTAL					25.0	700.0			6.39	0.26	
=====											

POTENCIAL TEORICO DEL RIO MANTARO SUP 2/14/79

I	L	H	Q	AFQ	CL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE YAULI B											
71	30.0	4100.0	2.4	0.0	10.0	128.0	1.28	4.47	5.62	0.56	0.00
72	20.0	3972.0	6.5	0.6	5.0	62.0	1.24	7.86	4.78	0.96	5.62
73	15.0	3910.0	8.6	0.0							10.40
SUBTOTAL					15.0	190.0			10.40	0.69	
=====											
AFLUENTE YAULI C											
73	15.0	3910.0	8.6	0.0	5.0	68.0	1.36	8.75	5.84	1.17	0.00
74	10.0	3842.0	8.9	0.0	10.0	147.0	1.47	9.18	13.24	1.32	5.84
75	0.0	3695.0	9.5	0.0							19.07
SUBTOTAL					15.0	215.0			19.07	1.27	
=====											
AFLUENTE ANDAYCARUGA											
75	18.0	4800.0	0.0	0.0	8.0	556.0	7.45	0.37	2.18	0.27	0.00
77	10.0	4204.0	0.7	0.0	10.0	259.0	2.59	1.35	3.43	0.34	2.18
78	0.0	3945.0	2.0	0.0							5.60
SUBTOTAL					18.0	855.0			5.60	0.31	
=====											
AFLUENTE HUARI SUP											
79	42.0	4800.0	0.5	0.0	8.0	351.0	4.39	1.30	4.49	0.56	0.00
80	34.0	4449.0	2.1	0.0	11.0	204.0	1.85	3.09	6.19	0.56	4.49
81	23.0	4245.0	4.1	0.0	10.0	300.0	3.00	4.74	13.94	1.39	10.68
82	13.0	3945.0	5.4	2.0	12.0	295.0	2.46	7.58	21.36	1.78	24.62
83	1.0	3650.0	7.4	0.0							45.98
SUBTOTAL					41.0	1150.0			45.98	1.12	
=====											
AFLUENTE HUARI INF											
83	1.0	3650.0	7.4	0.0	1.0	47.0	4.70	7.41	5.41	3.41	0.00
84	0.0	3603.0	7.4	0.0							3.41
SUBTOTAL					1.0	47.0			5.41	3.41	
=====											
AFLUENTE PINASCOCHASA											
85	21.0	4590.0	0.0	0.0	10.0	370.0	3.70	0.37	1.36	0.14	0.00
86	11.0	4220.0	0.7	0.0	10.0	420.0	4.20	1.12	4.63	0.46	1.36
87	1.0	3900.0	1.5	0.0							5.98
SUBTOTAL					20.0	790.0			5.98	0.30	
=====											
AFLUENTE PINASCOCHASA B											
87	1.0	3800.0	1.5	0.0	1.0	54.0	5.40	1.52	0.80	0.80	0.00
88	0.0	3746.0	1.5	0.0							0.80
SUBTOTAL					1.0	54.0			0.80	0.80	
=====											
AFLUENTE PACHACAYO A											
89	59.0	4750.0	0.6	0.0	7.0	310.0	4.43	1.02	3.09	0.44	0.00
90	52.0	4450.0	1.4	0.0	10.0	105.0	1.03	2.14	2.16	0.22	3.09
91	42.0	4347.0	2.9	0.0	10.0	217.0	2.17	3.29	7.00	0.70	5.25
92	32.0	4150.0	3.7	0.0	10.0	170.0	1.70	4.49	7.48	0.75	12.25
93	22.0	3960.0	5.3	0.0	10.0	185.0	1.85	5.64	10.24	1.02	19.73
94	12.0	3775.0	6.0	0.0							29.97
SUBTOTAL					47.0	985.0			29.97	0.64	
=====											
AFLUENTE PACHACAYO B											
94	12.0	3775.0	6.0	0.0	2.0	29.0	1.45	6.01	1.71	0.86	0.00
95	10.0	3746.0	6.0	1.5	4.0	98.0	2.45	8.28	7.96	1.99	1.71
96	6.0	3648.0	9.0	0.0							9.67
SUBTOTAL					6.0	127.0			9.67	1.61	

POTENCIAL TEORICO DEL RIO MANTARO SUP 2/14/79

I	L	H	G	AFD	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE PACHACAYO C											
95	6.0	3648.0	9.0	0.0							0.00
97	0.0	3505.0	10.1	0.0	6.0	143.0	2.38	9.53	13.37	2.23	13.37
SUBTOTAL					6.0	143.0			13.37	2.23	
=====											
AFLUENTE QUISUALCANCH											
98	38.0	4260.0	0.0	0.0							0.00
99	30.0	4068.0	0.6	0.0	8.0	192.0	2.40	0.28	0.53	0.07	0.53
100	20.0	3850.0	1.0	0.0	10.0	218.0	2.18	0.76	1.62	0.16	2.15
101	10.0	3650.0	2.3	0.0	10.0	200.0	2.00	1.65	3.24	0.32	5.39
102	0.0	3420.0	2.9	0.0	10.0	230.0	2.30	2.62	5.91	0.59	11.30
SUBTOTAL					38.0	840.0			11.30	0.30	
=====											
AFLUENTE MANTARO A											
103	229.0	4325.0	0.0	0.0							0.00
104	217.0	4197.0	2.5	0.0	12.0	128.0	1.07	1.25	1.57	0.13	1.57
105	207.0	4180.0	3.8	2.9	10.0	17.0	0.17	3.15	0.53	0.05	2.09
106	190.0	4110.0	9.6	0.0	17.0	70.0	0.41	8.18	5.61	0.33	7.71
SUBTOTAL					39.0	215.0			7.71	0.20	
=====											
AFLUENTE MANTARO B											
105	190.0	4110.0	9.6	0.0							0.00
107	187.0	4099.0	9.7	3.5	3.0	11.0	0.37	9.64	1.04	0.35	1.04
108	181.0	4091.0	14.2	8.8	6.0	8.0	0.13	15.67	1.07	0.18	2.11
109	180.0	4090.0	23.2	0.7	1.0	1.0	0.10	23.08	0.23	0.23	2.34
110	179.0	4085.0	24.0	0.0	1.0	5.0	0.50	23.94	1.17	1.17	3.51
SUBTOTAL					11.0	25.0			3.51	0.32	
=====											
AFLUENTE MANTARO C											
110	179.0	4085.0	24.0	0.0							0.00
111	178.0	4078.0	24.0	1.9	1.0	7.0	0.70	24.01	1.65	1.65	1.65
112	170.0	4074.0	26.0	2.4	8.0	4.0	0.05	25.98	1.02	0.13	2.67
113	157.0	4068.0	28.8	0.0	13.0	6.0	0.05	28.64	1.69	0.13	4.35
114	147.0	4018.0	29.5	0.0	10.0	50.0	0.50	29.15	14.30	1.43	18.65
115	137.0	3992.0	30.0	0.0	10.0	26.0	0.26	29.73	7.58	0.76	26.24
116	127.0	3952.0	30.7	8.6	10.0	40.0	0.40	30.33	11.90	1.19	38.14
117	112.0	3891.0	40.4	4.1	15.0	61.0	0.41	39.83	23.83	1.59	61.97
118	105.0	3860.0	44.6	1.1	7.0	31.0	0.44	44.53	13.54	1.93	75.52
119	100.0	3820.0	46.4	0.0	5.0	40.0	0.80	46.06	18.07	3.61	93.59
SUBTOTAL					79.0	265.0			93.59	1.18	
=====											
AFLUENTE MANTARO D											
119	100.0	3820.0	46.4	0.0							0.00
120	86.0	3750.0	49.1	2.2	14.0	70.0	0.50	47.74	32.78	2.34	32.78
121	79.0	3710.0	52.7	0.0	7.0	40.0	0.57	52.00	20.40	2.91	53.19
SUBTOTAL					21.0	110.0			53.19	2.53	
=====											
AFLUENTE MANTARO E											
121	79.0	3710.0	52.7	0.0							0.00
122	77.0	3695.0	52.7	9.5	2.0	15.0	0.75	52.72	7.76	3.88	7.76
123	65.0	3660.0	63.2	0.0	12.0	35.0	0.29	62.72	21.53	1.79	29.29
124	55.0	3603.0	64.4	7.4	10.0	57.0	0.57	63.80	35.68	3.57	64.97
125	43.0	3552.0	72.8	0.0	12.0	51.0	0.43	72.28	36.16	3.01	101.13
126	33.0	3505.0	73.7	10.1	10.0	47.0	0.47	73.25	33.78	3.38	134.90
127	24.0	3455.0	84.3	0.0	9.0	50.0	0.56	84.05	41.22	4.58	176.13
128	14.0	3420.0	85.2	2.9	10.0	35.0	0.35	84.75	29.10	2.91	205.23
129	0.0	3350.0	90.8	0.0	14.0	70.0	0.50	89.45	61.42	4.39	266.65
SUBTOTAL					79.0	360.0			266.65	3.38	
=====											

 * EL POTENCIAL TEORICO TOTAL DEL RIO MANTARO MED ES DE 4469.0 MW *
 * Y TIENE UNA LONGITUD ACUMULADA DE 1207.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 3.70 MW/KM *

POTENCIAL TEORICO DEL RIO MANTARO MED 2/14/79

I	L	H	Q	AFQ	DL	DH	PE	GC	POT	ESP	CUM
=====											
AFLUENTE AGUACHI											
1	19.0	4300.0	0.0	0.0							0.00
2	10.0	3750.0	1.4	0.0	9.0	550.0	6.11	0.72	3.88	0.43	3.88
3	0.0	3460.0	1.8	0.0	10.0	290.0	2.90	1.61	4.58	0.46	8.46
SUBTOTAL					19.0	840.0			8.46	0.45	
=====											
AFLUENTE CONAS SUPERI											
4	94.0	4540.0	0.1	0.0	15.0	250.0	1.67	0.51	1.26	0.08	0.00
5	79.0	4290.0	1.0	0.0	10.0	305.0	3.05	1.96	5.86	0.59	1.26
6	69.0	3985.0	3.0	0.0	10.0	210.0	2.10	3.37	6.93	0.69	7.11
7	59.0	3775.0	3.8	0.0	10.0	125.0	1.25	4.72	5.79	0.58	14.05
8	49.0	3650.0	5.7	0.0	10.0	110.0	1.10	5.81	6.27	0.63	19.84
9	39.0	3540.0	6.0	0.0	8.0	65.0	0.81	6.28	4.00	0.50	26.11
10	31.0	3475.0	6.6	0.0							30.11
SUBTOTAL					63.0	1065.0			30.11	0.48	
=====											
AFLUENTE CONAS MEDIO											
10	31.0	3475.0	6.6	0.0	2.0	15.0	0.75	9.45	1.39	0.69	0.00
11	29.0	3460.0	12.3	1.8	12.0	60.0	0.50	14.99	8.82	0.74	1.39
12	17.0	3400.0	15.9	0.0							10.21
SUBTOTAL					14.0	75.0			10.21	0.73	
=====											
AFLUENTE CONAS INFERI											
12	17.0	3400.0	15.9	0.0	7.0	140.0	2.00	16.15	22.18	3.17	0.00
13	10.0	3260.0	16.4	0.0	10.0	60.0	0.60	16.62	9.78	0.98	22.18
14	0.0	3200.0	16.8	0.0							31.96
SUBTOTAL					17.0	200.0			31.96	1.88	
=====											
AFLUENTE SANTO											
15	23.0	4460.0	0.3	0.0	13.0	810.0	6.23	3.87	30.72	2.36	0.00
16	10.0	3650.0	7.4	0.0	10.0	300.0	3.00	7.74	22.78	2.28	30.72
17	0.0	3350.0	8.1	0.0							53.50
SUBTOTAL					23.0	1110.0			53.50	2.33	
=====											
AFLUENTE AMARAES SUPE											
18	45.0	4555.0	0.1	0.0	11.0	375.0	3.41	2.12	7.79	0.71	0.00
19	34.0	4180.0	4.1	0.0	10.0	225.0	2.25	4.24	9.37	0.94	7.79
20	24.0	3955.0	4.4	0.0	10.0	255.0	2.55	4.75	11.87	1.19	17.16
21	14.0	3700.0	5.1	0.0	10.0	120.0	1.20	5.36	6.31	0.63	29.03
22	4.0	3580.0	5.6	0.0							35.34
SUBTOTAL					41.0	975.0			35.34	0.86	
=====											
AFLUENTE AMARAES INFE											
22	4.0	3580.0	5.6	0.0	4.0	230.0	5.75	5.63	12.70	3.18	0.00
23	0.0	3350.0	5.7	0.0							12.70
SUBTOTAL					4.0	230.0			12.70	3.18	
=====											

POTENCIAL TEORICO DEL RIO MANTARO MED 2/14/79

I	L	H	Q	AFQ	DL	DM	PE	GC	POT	ESP	CUM
=====											
AFLUENTE CANIPACO INF											
24	77.0	4700.0	0.1	0.0	11.0	260.0	2.36	0.35	0.90	0.08	0.00
25	66.0	4440.0	0.6	0.0	10.0	340.0	3.40	1.84	6.13	0.61	0.90
26	56.0	4100.0	3.0	0.0	10.0	200.0	2.00	3.49	6.85	0.68	7.03
27	46.0	3900.0	3.9	0.0	10.0	260.0	2.60	4.07	10.37	1.04	13.88
28	36.0	3640.0	4.2	0.0	12.0	290.0	2.42	4.37	12.44	1.04	24.25
29	24.0	3350.0	4.6	5.7	14.0	215.0	1.54	10.56	22.27	1.59	36.69
30	10.0	3135.0	10.9	0.0	10.0	105.0	1.05	10.95	11.27	1.13	51.96
31	0.0	3030.0	11.0	0.0							70.23
SUBTOTAL					77.0	1670.0			70.23	0.91	
=====											
AFLUENTE VILCA SUPERI											
32	78.0	4700.0	0.0	0.0	12.0	335.0	2.79	0.53	1.75	0.15	0.00
33	66.0	4365.0	1.0	0.0	10.0	215.0	2.15	2.65	5.58	0.56	1.75
34	56.0	4150.0	4.3	0.0	10.0	280.0	2.80	6.33	17.39	1.74	7.33
35	46.0	3870.0	8.4	0.0	10.0	245.0	2.45	8.85	21.27	2.13	24.72
36	36.0	3625.0	9.3	0.0	10.0	275.0	2.75	10.33	27.86	2.79	45.98
37	26.0	3350.0	11.4	8.1	13.0	145.0	1.12	21.58	30.69	2.36	73.85
38	13.0	3205.0	23.7	0.0	10.0	175.0	1.75	24.96	42.84	4.28	104.54
39	3.0	3030.0	26.2	11.0							147.39
SUBTOTAL					75.0	1670.0			147.39	1.97	
=====											
AFLUENTE VILCA INFERI											
39	3.0	3030.0	2	11.0	3.0	45.0	1.50	37.26	16.45	5.48	0.00
40	0.0	2985.0	37.3	0.0							16.45
SUBTOTAL					3.0	45.0			16.45	5.48	
=====											
AFLUENTE PALLCA											
41	28.0	4471.0	0.1	0.0	8.0	506.0	6.32	0.34	1.67	0.21	0.00
42	20.0	3965.0	0.6	0.0	10.0	450.0	4.50	1.12	4.95	0.49	0.00
43	10.0	3515.0	1.7	0.0	10.0	585.0	5.85	1.93	11.06	1.11	6.62
44	0.0	2930.0	2.2	0.0							17.68
SUBTOTAL					28.0	1541.0			17.68	0.63	
=====											
AFLUENTE ICHU											
45	97.0	4800.0	0.0	0.0	12.0	310.0	2.58	0.39	1.18	0.10	0.00
46	85.0	4490.0	0.7	0.0	10.0	110.0	1.10	1.64	1.77	0.18	1.00
47	75.0	4380.0	2.5	0.0	10.0	380.0	3.80	4.22	15.71	1.57	2.55
48	65.0	4000.0	5.9	0.0	10.0	310.0	3.10	6.75	20.52	2.05	18.66
49	55.0	3690.0	7.6	0.0	10.0	140.0	1.40	8.46	11.62	1.16	39.18
50	45.0	3550.0	9.3	0.0	10.0	175.0	1.75	9.85	16.91	1.69	50.81
51	35.0	3375.0	10.4	0.0	10.0	135.0	1.35	11.45	15.17	1.52	67.71
52	25.0	3240.0	12.5	0.0	10.0	125.0	1.25	13.16	16.14	1.61	82.8
53	15.0	3115.0	13.8	0.0	10.0	185.0	1.85	14.00	25.41	2.54	99.62
54	5.0	2930.0	14.2	2.2	5.0	90.0	1.80	16.51	14.58	2.92	124.43
55	0.0	2840.0	16.6	0.0							139.01
SUBTOTAL					97.0	1960.0			139.01	1.43	

POTENCIAL TEORICO DEL RIO MANTARO MED 2/14/79

I	L	M	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE ASHUARMA SP											
56	44.0	4550.0	0.0	0.0	12.0	440.0	3.67	0.56	2.42	0.20	0.00
57	32.0	4110.0	1.1	0.0	10.0	215.0	2.15	2.45	5.17	0.52	2.42
58	22.0	3895.0	3.8	0.0	10.0	345.0	3.45	5.70	19.31	1.93	7.59
59	12.0	3550.0	7.6	0.0							26.90
SUBTOTAL					32.0	1000.0			26.90	0.84	
=====											
AFLUENTE ASHUARMA IF											
59	12.0	3550.0	7.6	0.0	12.0	305.0	2.54	7.72	23.09	1.92	0.00
60	0.0	3245.0	7.8	0.0							23.09
SUBTOTAL					12.0	305.0			23.09	1.92	
=====											
AFLUENTE HUAYANAY											
61	37.0	4500.0	0.0	0.0	7.0	430.0	6.14	0.08	0.35	0.05	0.00
62	30.0	4070.0	0.2	0.0	10.0	215.0	2.15	0.20	0.43	0.04	0.35
63	20.0	3855.0	0.2	0.0	10.0	325.0	3.25	0.31	1.00	0.10	0.78
64	10.0	3530.0	0.4	0.0	10.0	590.0	5.90	1.14	6.59	0.66	1.78
65	0.0	2940.0	1.9	0.0							8.38
SUBTOTAL					37.0	1560.0			8.38	0.23	
=====											
AFLUENTE PACCHO											
66	33.0	4490.0	0.0	0.0	13.0	530.0	4.08	0.35	1.84	0.14	0.00
67	20.0	3960.0	0.7	0.0	10.0	510.0	5.10	0.87	4.34	0.43	1.84
68	10.0	3450.0	1.0	0.0	10.0	500.0	5.00	1.11	5.43	0.54	6.17
69	0.0	2950.0	1.2	0.0							11.61
SUBTOTAL					33.0	1540.0			11.61	0.35	
=====											
AFLUENTE PUNGORA											
70	61.0	4330.0	0.0	0.0	11.0	590.0	5.36	0.09	0.54	0.05	0.00
71	50.0	3740.0	0.2	0.0	10.0	690.0	6.90	0.62	4.22	0.42	0.54
72	40.0	3050.0	1.1	0.0	10.0	280.0	2.80	1.33	3.65	0.37	4.76
73	30.0	2770.0	1.6	0.0	10.0	195.0	1.95	1.77	3.38	0.34	8.41
74	20.0	2575.0	1.9	0.0	10.0	105.0	1.05	2.70	2.78	0.28	11.76
75	10.0	2470.0	3.4	0.0	10.0	70.0	0.70	3.65	2.50	0.25	14.56
76	0.0	2400.0	3.8	0.0							17.07
SUBTOTAL					61.0	1930.0			17.07	0.28	
=====											

POTENCIAL TEORICO DEL RIO MANTARO MED 2/14/79

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE CACHIMAYU											
77	131.0	4860.0	0.0	0.0							0.00
78	118.0	4310.0	1.0	0.0	13.0	550.0	4.23	0.48	2.60	0.20	2.60
79	108.0	3825.0	1.7	0.0	10.0	485.0	4.85	1.34	6.38	0.64	8.98
80	98.0	3615.0	2.0	0.0	10.0	210.0	2.10	1.88	3.87	0.39	12.85
81	81.0	3420.0	2.2	0.0	10.0	195.0	1.95	2.14	4.09	0.41	16.94
82	78.0	3270.0	4.9	0.0	10.0	150.0	1.50	3.57	5.25	0.53	22.19
83	68.0	3135.0	5.4	0.0	10.0	185.0	1.85	5.49	9.96	1.00	28.99
84	58.0	2950.0	5.6	1.2	15.0	250.0	1.67	6.97	17.10	1.14	38.95
85	43.0	2700.0	7.2	0.0	10.0	135.0	1.35	7.25	9.60	0.96	56.04
86	33.0	2555.0	7.3	0.0	10.0	165.0	1.65	7.62	12.33	1.23	71.97
87	23.0	2400.0	7.9	3.8	13.0	125.0	0.96	12.11	14.85	1.14	92.82
88	10.0	2275.0	12.5	0.0	10.0	135.0	1.35	12.64	16.74	1.67	109.56
89	0.0	2140.0	12.8	0.0							
SUBTOTAL					131.0	2720.0			109.56	0.84	
=====											
AFLUENTE HUARPA SUPER											
90	126.0	4750.0	0.0	0.0	10.0	480.0	4.80	0.53	2.49	0.25	0.00
91	116.0	4270.0	1.0	0.0	10.0	350.0	3.50	1.96	6.73	0.67	2.49
92	106.0	3920.0	2.9	0.0	10.0	310.0	3.10	3.72	11.32	1.13	9.21
93	96.0	3610.0	4.5	0.0	10.0	185.0	1.85	5.72	10.38	1.04	20.53
94	86.0	3425.0	6.9	0.0	8.0	175.0	2.19	8.45	14.51	1.81	30.91
95	78.0	3250.0	10.0	0.0							45.42
SUBTOTAL					48.0	1500.0			45.42	0.95	
=====											
AFLUENTE HUARPA MEDIO											
95	78.0	3250.0	10.0	0.0							0.00
96	76.0	3245.0	10.0	7.8	2.0	5.0	0.25	10.01	0.49	0.25	0.49
97	65.0	3085.0	18.2	0.0	11.0	160.0	1.45	18.04	28.31	2.57	28.80
98	55.0	2940.0	18.5	1.9	10.0	145.0	1.45	18.38	26.15	2.61	54.95
99	47.0	2790.0	20.7	0.0	8.0	150.0	1.87	20.59	30.30	3.79	85.25
100	37.0	2650.0	21.2	0.0	10.0	140.0	1.40	20.97	28.80	2.88	114.05
101	27.0	2500.0	21.5	0.0	10.0	150.0	1.50	21.34	31.40	3.14	145.45
102	17.0	2320.0	22.9	0.0	10.0	180.0	1.80	22.19	39.18	3.92	184.63
103	7.0	2190.0	23.0	12.8	10.0	130.0	1.30	22.97	29.29	2.93	213.92
104	4.0	2170.0	35.9	0.0	3.0	20.0	0.67	35.87	7.04	2.35	220.96
SUBTOTAL					74.0	1080.0			220.96	2.99	
=====											
AFLUENTE HUARPA INFER											
104	4.0	2170.0	35.9	0.0							0.00
105	0.0	2140.0	36.1	0.0	4.0	30.0	0.75	36.01	10.60	2.65	10.60
SUBTOTAL					4.0	30.0			10.60	2.65	

=====

I	L	H	N	AFG	DL	DM	PE	GC	POT	ESP	CIIM
---	---	---	---	-----	----	----	----	----	-----	-----	------

=====

AFLUENTE MANTARO MEDC

106	314.0	3350.0	90.8	0.0							
107	294.0	3270.0	94.8	0.0	20.0	80.0	0.40	92.79	72.83	3.64	72.83
108	274.0	3200.0	101.1	16.8	20.0	70.0	0.35	97.94	67.25	3.36	140.08
109	263.0	3173.0	123.0	0.0	11.0	27.0	0.25	120.47	31.91	2.90	171.99
110	253.0	3105.0	123.9	0.0	10.0	68.0	0.68	123.47	62.36	8.24	254.35
111	243.0	3060.0	124.2	0.0	10.0	45.0	0.45	124.07	54.77	5.48	309.12
112	233.0	2985.0	124.8	37.3	10.0	75.0	0.75	124.53	91.62	9.16	400.74
113	223.0	2930.0	163.7	0.0	10.0	55.0	0.55	162.92	67.90	8.79	488.65
114	213.0	2920.0	164.8	0.0	10.0	10.0	0.10	164.24	16.11	1.61	504.76
115	203.0	2840.0	168.3	16.6	10.0	80.0	0.80	166.57	130.72	13.07	655.46
116	194.0	2790.0	185.6	0.0	9.0	50.0	0.56	185.24	90.86	10.10	726.34
117	184.0	2670.0	186.9	0.0	10.0	120.0	1.20	186.22	219.22	21.92	945.57
118	174.0	2590.0	187.9	0.0	10.0	80.0	0.80	187.42	147.09	14.71	1092.65
119	164.0	2540.0	188.5	0.0	10.0	50.0	0.50	188.22	92.32	9.23	1184.98
SUBTOTAL					150.0	810.0			1184.98	7.90	

AFLUENTE MANTARO MEDD

119	164.0	2540.0	188.5	0.0							0.00
120	154.0	2490.0	192.2	0.0	10.0	50.0	0.50	190.36	93.37	9.34	93.37
121	144.0	2435.0	196.5	0.0	10.0	55.0	0.55	194.34	104.86	10.49	198.23
122	134.0	2380.0	200.3	0.0	10.0	55.0	0.55	198.39	107.04	10.70	305.27
123	124.0	2335.0	202.9	0.0	10.0	45.0	0.45	201.62	89.01	8.90	394.27
124	114.0	2290.0	207.3	0.0	10.0	45.0	0.45	205.12	90.55	9.06	484.62
125	104.0	2188.0	211.1	0.0	10.0	102.0	1.02	209.22	209.35	20.93	694.17
126	94.0	2140.0	214.7	36.1	10.0	48.0	0.48	212.91	100.26	10.03	794.43
127	84.0	2104.0	251.7	0.0	10.0	36.0	0.36	251.24	88.73	8.87	883.15
128	74.0	2045.0	258.1	0.0	10.0	59.0	0.59	254.88	147.52	14.75	1030.68
129	64.0	2015.0	262.0	0.0	10.0	30.0	0.30	260.03	76.53	7.65	1107.20
130	54.0	1960.0	266.8	0.0	10.0	55.0	0.55	264.37	142.64	14.26	1249.85
131	44.0	1908.0	270.6	0.0	10.0	52.0	0.52	268.68	137.06	13.71	1386.90
132	20.0	1730.0	284.1	0.0	24.0	178.0	0.74	277.31	484.24	20.18	1871.14
133	0.0	1600.0	290.3	0.0	20.0	130.0	0.65	287.18	366.23	16.31	2257.57
SUBTOTAL					164.0	940.0			2237.37	13.64	

 * EL POTENCIAL TEORICO TOTAL DEL RIO MANTARO INF ES DE 5025.8 MW *
 * Y TIENE UNA LONGITUD ACUMULADA DE 555.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 9.06 MW/KM *

POTENCIAL TEORICO DEL RIO MANTARO INF 2/14/79

I	L	H	Q	AFQ	DL	DM	PE	UC	POT	ESP	CUM
=====											
AFLUENTE UPAMAYU											
1	33.0	4192.0	0.0	0.0	13.0	937.0	7.21	0.93	8.59	0.66	0.00
2	20.0	3255.0	1.9	0.0	10.0	93.0	0.93	2.49	2.27	1.25	8.59
3	10.0	3162.0	3.1	0.0	10.0	1652.0	16.52	3.75	60.77	6.26	10.86
4	0.0	1510.0	4.4	0.0							
SUBTOTAL					33.0	2682.0			71.62	2.17	
=====											
AFLUENTE HUANCHUY											
5	49.0	4730.0	0.0	0.0	26.0	2230.0	8.58	1.73	37.79	1.45	0.00
6	23.0	2500.0	3.4	0.0	22.0	990.0	4.50	7.61	73.95	3.36	37.79
7	1.0	1510.0	11.8	4.4	1.0	115.0	11.50	16.17	18.24	18.24	111.74
8	0.0	1395.0	16.2	0.0							129.99
SUBTOTAL					49.0	3335.0			129.99	2.65	
=====											
AFLUENTE MATIBAMBA											
9	39.0	4500.0	0.1	0.0	19.0	1200.0	6.32	1.21	14.27	0.75	0.00
10	20.0	3300.0	2.4	0.0	10.0	569.0	5.69	2.88	16.10	1.61	14.27
11	10.0	2731.0	3.4	0.0	10.0	1211.0	12.11	4.46	52.99	5.30	30.57
12	0.0	1520.0	5.5	0.0							83.36
SUBTOTAL					39.0	2980.0			83.36	2.18	
=====											
AFLUENTE PANIAHUANCA											
13	50.0	4660.0	0.1	0.0	11.0	1140.0	10.36	0.74	8.29	0.75	0.00
14	39.0	3520.0	1.4	0.0	10.0	840.0	8.40	2.50	20.60	2.06	8.29
15	29.0	2680.0	3.6	0.0	10.0	580.0	5.80	4.77	27.16	2.72	28.90
16	19.0	2100.0	6.0	0.0	10.0	580.0	5.80	8.23	46.82	4.68	56.06
17	9.0	1520.0	10.5	5.5	9.0	424.0	4.71	17.47	72.68	8.08	102.88
18	0.0	1096.0	18.9	0.0							175.56
SUBTOTAL					50.0	3564.0			175.56	3.51	
=====											
AFLUENTE PUNTO											
19	29.0	4350.0	0.0	0.0	19.0	1040.0	5.47	1.47	15.04	0.79	0.00
20	10.0	3310.0	2.9	0.0	10.0	1110.0	11.10	3.49	37.97	3.80	15.04
21	0.0	2200.0	4.0	0.0							53.00
SUBTOTAL					29.0	2150.0			53.00	1.83	
=====											

POTENCIAL TEORICO DEL RIO MANTARO INF 2/14/79

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE SN FERNANDO											
22	65.0	4225.0	0.0	0.0							0.00
23	42.0	2890.0	3.1	0.0	23.0	1335.0	5.80	1.57	20.51	0.89	20.51
24	32.0	2200.0	5.1	4.0	10.0	690.0	6.90	4.13	27.97	2.80	48.48
25	20.0	1760.0	14.7	0.0	12.0	440.0	3.67	11.95	51.60	4.30	100.08
26	10.0	1450.0	17.9	0.0	10.0	310.0	3.10	16.32	49.63	4.96	149.71
27	0.0	1030.0	21.0	0.0	10.0	420.0	4.20	19.43	80.07	8.01	229.78
=====											
SUBTOTAL					65.0	3195.0			229.78	3.54	
=====											
AFLUENTE PARAISO											
28	33.0	4200.0	0.0	0.0							0.00
29	12.0	1480.0	3.3	0.0	21.0	2720.0	12.95	1.66	44.21	2.11	44.21
30	0.0	808.0	7.7	0.0	12.0	672.0	5.60	5.49	36.16	3.01	80.37
=====											
SUBTOTAL					33.0	3392.0			80.37	2.44	
=====											
AFLUENTE UCHUYUNCA											
31	21.0	4350.0	0.0	0.0							0.00
32	0.0	1630.0	1.8	0.0	21.0	2720.0	12.95	0.89	23.62	1.12	23.62
=====											
SUBTOTAL					21.0	2720.0			23.62	1.12	
=====											
AFLUENTE GUINQUIFUNCO											
33	40.0	4325.0	0.0	0.0							0.00
34	26.0	2391.0	1.1	0.0	14.0	1934.0	13.81	0.57	10.74	0.77	10.74
35	16.0	1630.0	4.6	1.8	10.0	761.0	7.61	2.88	21.49	2.15	32.23
36	0.0	583.0	9.8	0.0	16.0	1047.0	6.54	8.10	83.20	5.20	115.42
=====											
SUBTOTAL					40.0	3742.0			115.42	2.89	
=====											
AFLUENTE MANTARO INF											
37	196.0	1600.0	290.3	0.0							0.00
38	180.0	1480.0	295.3	0.0	16.0	120.0	0.75	292.81	344.78	21.54	344.78
39	170.0	1395.0	297.6	16.2	10.0	85.0	0.85	296.45	247.20	24.72	591.89
40	158.0	1292.0	315.2	0.0	12.0	103.0	0.86	314.46	317.74	26.48	909.63
41	148.0	1151.0	318.2	0.0	10.0	141.0	1.41	316.67	438.02	43.80	1347.65
42	138.0	1096.0	320.2	18.9	10.0	55.0	0.55	319.21	172.23	17.22	1519.88
43	116.0	1030.0	341.9	21.0	22.0	66.0	0.30	340.52	220.47	10.02	1740.35
44	94.0	902.0	369.4	0.0	22.0	128.0	0.58	366.10	459.71	20.90	2200.06
45	79.0	808.0	373.2	7.7	15.0	94.0	0.63	371.28	342.37	22.82	2542.44
46	68.0	728.0	388.8	0.0	11.0	80.0	0.73	384.83	302.02	27.46	2844.45
47	53.0	660.0	393.8	0.0	15.0	68.0	0.45	391.33	261.05	17.40	3105.50
48	36.0	583.0	395.6	9.8	17.0	77.0	0.45	394.71	298.15	17.54	3403.65
49	18.0	502.0	409.9	0.0	18.0	81.0	0.45	407.64	323.91	18.00	3727.57
50	0.0	419.0	414.1	0.0	18.0	83.0	0.46	411.99	335.46	18.64	4063.02
=====											
SUBTOTAL					196.0	1181.0			4063.02	20.73	

 * EL POTENCIAL TEORICO TOTAL DEL RIO PACHITEA ES DE 6145.6 MW *
 * Y TIENE UNA LUNGITUD ACUMULADA DE 1355.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 4.54 MW/KM *

POTENCIAL TEORICO DEL RIO PACHITEA 2/14/79

I	L	H	Q	AFU	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE APUHUQUIARI											
1	30.0	1000.0	6.0	0.0							0.00
2	0.0	550.0	56.6	0.0	30.0	450.0	1.50	31.35	138.39	4.61	138.39
SUBTOTAL					30.0	450.0			138.39	4.61	
=====											
AFLUENTE NAZARATEGUI											
3	45.0	1000.0	4.4	0.0							0.00
4	0.0	480.0	50.6	0.0	45.0	520.0	1.16	27.51	140.34	3.12	140.34
SUBTOTAL					45.0	520.0			140.34	3.12	
=====											
AFLUENTE AZUPIZU											
5	40.0	1000.0	6.1	0.0							0.00
6	0.0	470.0	62.6	0.0	40.0	530.0	1.32	34.36	178.67	4.47	178.67
SUBTOTAL					40.0	530.0			178.67	4.47	
=====											
AFLUENTE NAHA											
7	35.0	500.0	7.3	0.0							0.00
8	0.0	470.0	43.9	0.0	35.0	30.0	0.09	25.61	7.54	0.22	7.54
SUBTOTAL					35.0	30.0			7.54	0.22	
=====											
AFLUENTE ANCAYALI											
9	51.0	1000.0	11.8	0.0							0.00
10	1.0	470.0	78.0	43.9	50.0	530.0	1.06	44.90	233.47	4.67	233.47
11	0.0	450.0	125.2	0.0	1.0	20.0	2.00	123.61	24.25	24.25	257.72
SUBTOTAL					51.0	550.0			257.72	5.05	
=====											
AFLUENTE APUKAYALI											
12	100.0	1000.0	0.8	0.0							0.00
13	50.0	480.0	104.1	0.0	50.0	520.0	1.04	52.46	267.59	5.35	267.59
14	0.0	440.0	162.7	0.0	50.0	40.0	0.08	133.36	52.33	1.05	319.92
SUBTOTAL					100.0	560.0			319.92	3.20	
=====											
AFLUENTE HUANCABAMBA											
15	45.0	3200.0	1.1	0.0							0.00
16	0.0	1300.0	30.0	0.0	45.0	1900.0	4.22	15.54	289.73	6.44	289.73
SUBTOTAL					45.0	1900.0			289.73	6.44	
=====											
AFLUENTE CRUZ											
17	80.0	4200.0	2.3	0.0							0.00
18	50.0	2000.0	23.4	0.0	30.0	2200.0	7.33	12.84	277.18	9.24	277.18
19	0.0	950.0	71.1	0.0	50.0	1050.0	2.10	47.25	486.65	9.73	763.83
SUBTOTAL					80.0	3250.0			763.83	9.55	
=====											
AFLUENTE LAGARTO											
20	40.0	1200.0	1.5	0.0							0.00
21	0.0	490.0	24.7	0.0	40.0	710.0	1.77	13.11	91.35	2.28	91.35
SUBTOTAL					40.0	710.0			91.35	2.28	
=====											
AFLUENTE ESCOZUZAN											
22	40.0	1800.0	2.7	0.0							0.00
23	0.0	480.0	22.5	0.0	40.0	1320.0	3.30	12.56	162.92	4.07	162.92
SUBTOTAL					40.0	1320.0			162.92	4.07	
=====											
AFLUENTE LORENCILLO											
24	86.0	1900.0	2.8	0.0							0.00
25	85.0	850.0	17.1	0.0	1.0	1050.0	105.00	9.98	102.79	102.79	102.79
26	35.0	480.0	59.9	0.0	50.0	370.0	0.74	38.49	139.72	2.79	242.51
27	0.0	430.0	88.0	0.0	35.0	50.0	0.14	73.96	36.28	1.04	278.79
SUBTOTAL					86.0	1470.0			278.79	3.24	
=====											

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE POZUZO											
28	195.0	3000.0	1.1	0.0							
					45.0	1700.0	3.78	9.90	165.12	3.67	0.00
29	150.0	1300.0	18.7	30.0							165.12
					40.0	350.0	0.87	63.89	219.36	5.48	384.48
30	110.0	950.0	79.0	71.1							617.62
					25.0	150.0	0.60	158.44	255.14	9.33	617.62
31	85.0	800.0	166.8	0.0							1170.50
					50.0	310.0	0.62	181.80	552.88	11.06	1170.50
32	35.0	490.0	196.8	24.7							1505.46
					25.0	60.0	0.24	229.28	134.96	5.40	1505.46
33	10.0	430.0	237.0	88.0							1337.66
					10.0	10.0	0.10	328.23	32.20	3.22	1337.66
34	0.0	420.0	331.4	0.0							
SUBTOTAL					195.0	2580.0			1337.66	6.86	
=====											
AFLUENTE STA ISABEL											
35	30.0	1000.0	0.4	0.0							0.00
					30.0	585.0	1.95	6.52	37.40	1.25	37.40
36	0.0	415.0	12.7	0.0							
SUBTOTAL					30.0	585.0			37.40	1.25	
=====											
AFLUENTE YUYAPICHIS											
37	30.0	500.0	11.5	0.0							0.00
					30.0	100.0	0.33	18.82	18.46	0.62	18.46
38	0.0	400.0	26.2	0.0							
SUBTOTAL					30.0	100.0			18.46	0.62	
=====											
AFLUENTE STA MARTHA											
39	95.0	1900.0	1.2	0.0							0.00
					45.0	600.0	1.33	10.72	63.12	1.40	63.12
40	50.0	1300.0	20.2	0.0							369.84
					50.0	930.0	1.86	35.62	306.71	6.13	369.84
41	0.0	370.0	47.0	0.0							
SUBTOTAL					95.0	1530.0			369.84	3.69	
=====											
AFLUENTE PATA											
42	30.0	800.0	0.2	0.0							0.00
					30.0	450.0	1.50	15.45	68.19	2.27	68.19
43	0.0	350.0	30.6	0.0							
SUBTOTAL					30.0	450.0			68.19	2.27	
=====											
AFLUENTE PACHITEA											
44	383.0	1000.0	4.7	0.0							0.00
					25.0	450.0	1.80	15.20	67.09	2.68	67.09
45	358.0	550.0	25.7	56.6							122.20
					1.0	60.0	6.00	93.64	55.11	55.11	122.20
46	357.0	490.0	104.9	0.0							134.37
					50.0	10.0	0.02	124.06	12.17	0.24	134.37
47	307.0	480.0	143.2	50.6							155.00
					1.0	10.0	1.00	210.33	20.63	20.63	155.00
48	306.0	470.0	226.8	62.6							214.57
					15.0	20.0	0.13	303.62	59.57	3.97	214.57
49	291.0	450.0	317.9	125.2							259.42
					30.0	10.0	0.03	457.14	44.85	1.49	259.42
50	261.0	440.0	471.2	162.7							321.92
					1.0	10.0	1.00	637.07	62.50	62.50	321.92
51	260.0	430.0	640.3	0.0							384.95
					25.0	10.0	0.04	642.53	63.03	2.52	384.95
52	235.0	420.0	644.8	331.4							433.03
					35.0	5.0	0.01	980.21	48.08	1.37	433.03
53	200.0	415.0	984.3	12.7							581.00
					20.0	15.0	0.07	1005.62	147.98	7.40	581.00
54	180.0	400.0	1014.3	26.2							887.64
					50.0	30.0	0.06	1041.93	306.64	6.13	887.64
55	130.0	370.0	1043.4	47.0							995.24
					20.0	10.0	0.05	1096.77	107.59	5.38	995.24
56	110.0	360.0	1103.2	0.0							1104.99
					50.0	10.0	0.02	1118.78	109.75	2.20	1104.99
57	60.0	350.0	1134.4	30.6							1450.58
					10.0	30.0	0.30	1174.27	345.59	34.56	1450.58
58	50.0	320.0	1183.5	0.0							1684.87
					50.0	20.0	0.04	1194.15	234.29	4.69	1684.87
59	0.0	300.0	1204.8	0.0							
SUBTOTAL					383.0	700.0			1684.87	4.40	
=====											

 * EL POTENCIAL TEORICO TOTAL DEL RIO AGUAYTIA ES DE 1084.7 MW *
 * Y TIENE UNA LONGITUD ACUMULADA DE 652.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 1.66 MW/KM *

POTENCIAL TEORICO DEL RIO AGUAYTIA 2/14/79

I	L	H	Q	AFG	DL	DH	PE	QC	POT	ESP	CUM
AFLUENTE PINTOYACU											
1	35.0	970.0	3.1	0.0							0.00
2	0.0	450.0	9.4	0.0	35.0	520.0	1.49	6.22	31.73	0.91	31.73
SUBTOTAL					35.0	520.0			31.73	0.91	
AFLUENTE SANTAANA											
3	65.0	950.0	0.8	0.0							0.00
4	50.0	480.0	6.3	0.0	15.0	470.0	3.13	3.53	16.26	1.08	16.26
5	0.0	430.0	59.9	0.0	50.0	50.0	0.10	33.11	16.24	0.32	32.50
SUBTOTAL					65.0	520.0			32.50	0.50	
AFLUENTE CHIO											
6	25.0	1100.0	2.7	0.0							0.00
7	0.0	480.0	10.6	0.0	25.0	620.0	2.48	6.62	40.26	1.61	40.26
SUBTOTAL					25	620.0			40.26	1.61	
AFLUENTE SANALEJANDRO											
8	115.0	2000.0	0.3	0.0							0.00
9	70.0	480.0	26.1	10.6	45.0	1520.0	3.38	13.21	196.93	4.38	196.93
10	50.0	450.0		0.0	20.0	30.0	0.15	45.44	13.37	0.67	210.30
11	0.0	420.0	105.6	0.0	50.0	30.0	0.06	79.93	23.52	0.47	233.83
SUBTOTAL					15.0	1580.0			233.83	2.03	
AFLUENTE ORUVA											
12	20.0	480.0	3.2	0.0							0.00
13	0.0	450.0	9.7	0.0	20.0	30.0	0.15	6.44	1.90	0.09	1.90
SUBTOTAL					20.0	30.0			1.90	0.09	
AFLUENTE TASHUAILLO											
14	37.0	490.0	1.6	0.0							0.00
15	2.0	400.0	36.2	9.7	35.0	90.0	0.26	18.91	16.69	0.48	16.69
16	0.0	390.0	49.5	0.0	2.0	10.0	0.50	47.68	4.68	2.34	21.03
SUBTOTAL					37.0	100.0			21.37	0.58	
AFLUENTE JUANTIA											
17	65.0	495.0	1.2	0.0							0.00
18	50.0	485.0	7.6	0.0	15.0	10.0	0.07	4.42	0.43	0.03	0.43
19	0.0	470.0	34.2	0.0	50.0	15.0	0.03	20.90	3.08	0.06	3.51
SUBTOTAL					65.0	25.0			3.51	0.05	
AFLUENTE AGUAYTIA											
20	290.0	3200.0	1.3	0.0							0.00
21	260.0	950.0	17.1	0.0	30.0	2250.0	7.50	9.22	203.60	6.79	203.60
22	210.0	450.0	78.5	9.4	50.0	500.0	1.00	47.81	234.51	4.69	438.10
23	185.0	430.0	96.3	59.9	25.0	20.0	0.08	92.08	18.07	0.72	456.17
24	140.0	420.0	178.5	105.6	45.0	10.0	0.02	167.36	16.42	0.36	472.59
25	95.0	390.0	305.1	49.5	45.0	30.0	0.07	294.60	86.70	1.93	559.29
26	45.0	370.0	393.0	34.2	50.0	20.0	0.04	373.82	73.34	1.47	632.63
27	0.0	350.0	459.3	0.0	45.0	20.0	0.04	443.27	86.97	1.93	719.60
SUBTOTAL					290.0	2850.0			719.60	2.48	

 * EL POTENCIAL TEORICO TOTAL DEL RIO ENE ES DE 2015.1 MW *
 * Y TIENE UNA LONGITUD ACUMULADA DE 451.0 KM *
 * Y UN POTENCIAL ESPECIFICO DE 4.47 MW/KM *

POTENCIAL TEORICO DEL RIO ENE 2/14/79

I	L	H	G	AFG	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE CHICHINI											
1	62.0	3650.0	1.3	0.0							0.00
2	50.0	1000.0	6.1	0.0	12.0	2650.0	22.08	3.78	98.23	8.19	98.23
3	0.0	397.0	43.3	0.0	50.0	603.0	1.21	24.66	145.87	2.92	244.10
					SUBTOTAL	62.0	3253.0		244.10	3.94	
=====											
AFLUENTE MISION											
4	50.0	2300.0	0.6	0.0							0.00
5	0.0	405.0	29.8	0.0	50.0	1895.0	3.79	15.22	282.85	5.66	282.85
					SUBTOTAL	50.0	1895.0		282.85	5.66	
=====											
AFLUENTE QUEMPIRI											
6	76.0	2500.0	1.8	0.0							0.00
7	50.0	595.0	10.4	0.0	26.0	1905.0	7.33	6.10	114.02	4.11	114.02
8	3.0	405.0	26.7	29.8	47.0	190.0	0.40	18.52	34.53	0.73	148.54
9	0.0	391.0	56.8	0.0	3.0	14.0	0.47	56.66	7.78	2.59	156.33
					SUBTOTAL	76.0	2109.0		156.33	2.06	
=====											
AFLUENTE MAMIRI											
10	45.0	2200.0	0.8	0.0							0.00
11	0.0	386.0	12.8	0.0	45.0	1814.0	4.03	6.78	120.62	2.68	120.62
					SUBTOTAL	45.0	1814.0		120.62	2.68	
=====											
AFLUENTE POMURENI											
12	48.0	2150.0	0.3	0.0							0.00
13	0.0	383.0	8.1	0.0	48.0	1767.0	3.68	4.19	72.66	1.51	72.66
					SUBTOTAL	48.0	1767.0		72.66	1.51	
=====											
AFLUENTE CANCHINGARI											
14	40.0	1850.0	1.1	0.0							0.00
15	0.0	380.0	11.8	0.0	40.0	1470.0	3.68	6.47	93.27	2.33	93.27
					SUBTOTAL	40.0	1470.0		93.27	2.33	
=====											
AFLUENTE ENE											
16	130.0	419.0	1339.0	0.0							0.00
17	90.0	397.0	1379.0	43.3	0.0	22.0	0.05	1359.01	293.30	7.33	293.30
18	80.0	391.0	1424.5	56.6	10.0	6.0	0.06	1423.38	83.78	8.38	377.08
19	71.0	386.0	1482.4	12.8	9.0	5.0	0.06	1481.87	72.69	8.08	449.77
20	65.0	383.0	1497.7	8.1	6.0	3.0	0.05	1496.45	44.04	7.34	493.81
21	60.0	380.0	1507.3	11.8	5.0	3.0	0.06	1506.59	44.34	8.87	538.15
22	50.0	375.0	1541.6	0.0	10.0	5.0	0.05	1530.36	75.06	7.51	613.21
23	0.0	347.0	1604.2	0.0	50.0	28.0	0.06	1572.90	432.04	8.64	1045.25
					SUBTOTAL	130.0	72.0		1045.25	8.04	
=====											

```

*****
* EL POTENCIAL TEORICO TOTAL DEL RIO TAMBO      ES DE  2126.8 MW  *
*                                               *
*           Y TIENE UNA LONGITUD ACUMULADA DE   293.0 KM   *
*                                               *
*           Y UN POTENCIAL ESPECIFICO DE       7.26 MW/KM  *
*                                               *
*****

```

POTENCIAL TEORICO DEL RIO TAMBO 2/14/79

I	L	H	Q	AFQ	DL	DH	PE	QC	POT	ESP	CUM
=====											
AFLUENTE MATIAS											
1	35.0	1200.0	1.0	0.0							0.00
					35.0	871.0	2.49	7.76	66.30	1.89	66.30
2	0.0	329.0	14.5	0.0							66.30
									66.30	1.89	
					SUBTOTAL	35.0	871.0		66.30	1.89	
=====											
AFLUENTE UNGUNINI											
3	32.0	2000.0	1.0	0.0							0.00
					32.0	1682.0	5.26	5.90	97.37	3.04	97.37
4	0.0	318.0	10.8	0.0							97.37
									97.37	3.04	
					SUBTOTAL	32.0	1682.0		97.37	3.04	
=====											
AFLUENTE PAYENI											
5	36.0	1800.0	3.5	0.0							0.00
					36.0	1492.0	4.14	15.61	243.06	6.75	243.06
6	0.0	308.0	29.7	0.0							243.06
									243.06	6.75	
					SUBTOTAL	36.0	1492.0		243.06	6.75	
=====											
AFLUENTE MAYUCU											
7	50.0	1500.0	0.7	0.0							0.00
					50.0	1197.0	2.39	7.93	93.11	1.86	93.11
8	0.0	303.0	15.2	0.0							93.11
									93.11	1.86	
					SUBTOTAL	50.0	1197.0		93.11	1.86	
=====											
AFLUENTE TAMBO											
9	140.0	347.0	2059.0	0.0							0.00
					32.0	18.0	0.06	2070.96	365.69	11.43	365.69
10	108.0	329.0	2082.9	14.5							365.69
					20.0	11.0	0.05	2107.72	227.44	11.37	593.13
11	88.0	318.0	2118.0	10.8							593.13
					16.0	10.0	0.06	2135.00	209.44	11.64	802.58
12	70.0	308.0	2141.2	29.7							802.58
					10.0	5.0	0.05	2173.44	106.61	10.66	909.19
13	60.0	303.0	2176.0	15.2							909.19
					60.0	33.0	0.05	2217.28	717.80	11.96	1626.99
14	0.0	270.0	2243.4	0.0							1626.99
									717.80	11.96	
					SUBTOTAL	140.0	77.0		1626.99	11.62	
=====											