

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA DESCENDENTE POR :

CON 0.00 MW \$ PI \$= 5000.00 MW

RANK	PROYECTO	ALT.	QM (M**3/S)	HN (M)	PI (MW)	PG (MW)	EP (GWH)	FS (GWH)	ET (GWH)	INV (10**6 \$)	FEC (\$/MWH)	FFC1 (-)	KESP (\$/KW)	PROYECTOS CONDICIONANTES
111	APUR100	3	70.9	260.8	154.3	50.7	373.2	407.5	780.7	241.8	49.163	0.779	1567.1	
112	CHAL010	8	17.1	1061.4	151.4	151.3	1325.3	0.0	1325.3	139.5	12.345	0.313	921.4	AGRICULTURA
113	APUR115	1	72.8	249.1	151.3	28.4	176.5	631.8	808.3	276.9	65.956	0.879	1830.1	
114	CHAL50	9	35.4	503.9	148.8	73.3	524.6	329.6	854.2	242.9	41.325	0.748	1632.4	
115	PALCA10	7	15.5	1143.3	147.8	111.9	715.2	205.5	920.7	275.2	39.464	0.807	1862.0	
116	MAN90	4	134.6	130.9	146.9	76.0	763.6	209.7	973.3	271.6	36.688	0.769	1848.9	
117	LAMB50	1	41.1	422.7	144.8	30.1	186.6	659.1	845.7	137.4	31.224	0.430	948.9	
118	TAMBO50	2	31.5	544.1	142.9	127.3	789.7	347.0	1136.7	120.1	39.779	0.307	840.4	TAMBO10
119	OCONA60	1	86.5	197.3	142.4	57.1	450.5	312.4	762.9	415.3	80.308	1.398	2916.4	
120	VILCA120	6	46.1	367.7	141.4	90.4	663.5	211.0	874.5	453.4	69.154	1.397	3206.5	
121	PISCO080	2	47.1	359.7	141.2	86.3	535.6	409.6	945.2	216.8	20.233	0.634	1535.4	CHAL010
122	CHAN25	2	32.0	522.7	139.5	113.2	722.0	222.2	944.2	207.0	29.143	0.608	1483.9	
123	MAN170	8	138.6	120.6	139.4	64.6	648.5	239.3	887.8	160.1	24.457	0.491	1148.5	
124	POZ50	1	183.7	90.2	138.3	37.3	378.5	490.0	868.5	149.6	28.136	0.466	1081.7	
125	PAT120	1	22.5	735.3	138.0	110.4	717.7	223.5	941.2	246.7	34.887	0.728	1787.7	
126	STOM170	2	95.7	171.8	137.2	25.5	158.3	574.5	732.8	223.0	58.707	0.781	1625.4	
127	VNOTA90	2	94.4	165.5	130.3	59.5	538.1	238.4	776.5	347.9	62.090	1.193	2670.0	
128	CANET130	1	57.6	269.8	129.6	25.7	159.6	483.9	643.5	169.5	49.508	0.658	1307.9	
129	OCONA15	1	20.0	772.3	128.8	69.8	464.5	176.6	641.1	312.3	66.254	1.218	2474.9	
130	PAT150	1	44.9	337.2	126.3	51.6	320.5	440.0	760.5	252.5	54.806	0.887	1999.2	
131	MARA250	2	244.7	61.6	125.6	12.4	126.2	652.3	778.5	97.3	25.241	0.337	774.7	
132	CASMA20	1	20.0	741.1	123.6	110.6	686.5	128.1	814.6	99.9	29.226	0.337	808.3	CASMA10
133	PALCA15	2	22.4	655.5	122.5	33.5	207.7	590.9	798.6	105.6	24.610	0.362	862.0	
134	EULA30	1	32.0	452.7	120.8	120.8	779.6	93.1	872.7	125.7	20.511	0.407	1040.6	FULA10
135	APUR240	6	221.0	65.0	119.8	24.3	239.4	541.9	781.3	98.2	22.580	0.345	819.7	
136	COLCA70	1	52.9	269.8	119.1	5.7	35.7	606.8	642.5	179.6	62.141	0.720	1508.0	
137	TAMBO60	4	31.5	449.7	118.1	105.2	652.6	286.8	939.4	189.2	54.041	0.585	1602.0	TAMBO10
138	MAN210	5	156.1	89.9	117.1	39.9	398.4	290.9	689.3	104.0	22.441	0.400	888.1	
139	PAUC280	5	72.0	191.7	115.1	66.2	493.1	289.9	783.0	261.4	48.063	0.927	2271.1	
140	COLCA80	3	60.8	224.8	114.0	17.0	105.6	463.9	569.5	238.4	82.848	1.048	2091.2	
141	CANET60	1	31.8	427.2	113.4	22.5	139.6	423.4	563.0	122.7	40.964	0.544	1082.0	
142	SANTA80	5	62.7	215.8	112.9	37.0	229.5	479.2	708.7	278.1	69.541	1.063	2463.2	
143	MAN140	4	123.0	110.0	112.8	70.1	703.5	91.0	794.5	168.8	26.440	0.596	1496.5	
144	LAMB30	1	34.2	394.7	112.6	32.1	215.7	427.4	643.1	171.9	46.943	0.701	1526.6	
145	CASMA10	2	20.0	672.4	112.2	88.0	574.3	170.7	745.0	269.8	44.712	0.930	2404.6	
146	APUR741	1	566.7	23.7	112.0	7.2	72.0	622.3	694.3	87.5	26.777	0.340	781.2	
147	URUB250	1	236.4	56.8	112.0	33.4	337.8	374.0	711.8	109.4	24.453	0.418	976.8	
148	OXAZ0	9	11.5	1164.4	111.7	55.7	358.3	394.7	753.0	204.8	43.227	0.753	1835.5	
149	MARA370	1	338.0	39.5	111.4	11.4	114.4	575.9	690.3	86.3	25.147	0.357	774.7	
150	INA140	1	336.0	39.6	110.9	8.4	83.5	603.6	687.1	75.1	22.854	0.295	677.2	
151	APUR45	3	66.2	199.5	110.1	64.3	529.1	117.3	646.4	291.1	58.095	1.193	2644.0	
152	CHIL140	1	24.1	539.6	108.6	43.0	266.7	322.5	589.2	211.1	57.857	0.924	1943.8	
153	OLMOS10	1	32.4	396.9	107.4	66.7	439.8	309.5	749.3	35.7	7.047	0.133	332.4	AGRICULTURA
154	ANTA27	2	33.9	379.5	107.3	40.9	279.2	306.4	585.6	254.4	69.014	1.123	2370.9	
155	PAT110	1	18.9	679.9	107.3	42.6	264.1	393.2	657.3	96.5	24.559	0.394	899.3	
156	APUR690	1	328.4	39.0	106.8	6.0	61.0	601.0	662.0	76.0	24.673	0.310	711.6	
157	PUCH20	9	28.8	440.9	105.9	53.6	363.2	241.7	604.9	333.2	80.745	1.446	3146.4	
158	HUAL50	1	23.4	542.1	105.8	65.3	431.8	196.0	627.8	220.2	48.751	0.933	2081.3	
159	VELL37	8	20.7	605.0	104.6	64.8	425.2	161.2	586.4	221.0	51.257	0.983	2112.8	
160	PUNA10	4	13.4	932.8	104.4	104.4	777.4	19.9	797.3	202.9	30.222	0.730	1943.5	
161	RAPAY20	1	17.8	701.5	104.3	28.2	174.8	489.3	664.1	159.0	44.463	0.651	1524.4	
162	CANET80	1	31.8	382.2	101.5	20.1	124.9	378.8	503.7	93.9	35.020	0.465	925.1	
163	MARA200	1	162.0	75.1	101.4	26.2	265.4	398.5	663.9	75.1	18.952	0.310	740.6	
164	COTAH10	3	21.5	562.2	100.8	46.3	309.3	149.7	459.0	291.2	88.899	1.533	2888.9	
165	UTC70	1	88.5	135.8	100.2	57.3	576.4	132.3	708.7	239.2	43.672	0.948	2387.2	
166	URUM15	10	21.2	563.4	99.6	80.0	544.8	150.3	695.1	312.3	59.082	1.257	3135.5	
167	URAB10	3	9.6	1228.8	98.4	98.4	861.6	0.0	861.6	230.3	31.350	0.795	2340.4	
168	CHAN30	4	77.1	150.6	96.8	46.5	441.2	228.0	669.2	191.5	40.459	0.798	1978.3	
169	TABLA10	1	27.5	421.1	96.6	52.5	340.7	235.6	576.3	182.2	44.497	0.804	1886.1	
170	POZ20	7	48.6	237.4	96.2	96.2	675.1	58.7	733.8	261.6	43.557	1.023	2719.3	
171	MARCA70	2	64.0	179.9	96.0	7.4	46.1	548.9	595.0	138.5	50.690	0.628	1442.7	
172	OCONA80	1	89.7	127.9	95.7	22.1	164.0	278.8	442.8	208.2	80.481	1.144	2175.5	
173	ARMA30	2	9.4	1217.5	94.9	0.0	0.0	242.8	242.8	115.9	111.975	0.872	1221.3	
174	TAMBO30	1	31.5	359.7	94.5	84.1	522.1	229.4	751.5	231.1	69.478	0.893	2445.5	TAMBO10
175	CHANC20	1	15.7	719.4	94.0	25.4	157.4	440.8	598.2	153.8	47.755	0.699	1636.2	
176	VNOTA140	1	104.0	108.4	94.0	62.6	654.2	52.5	706.7	147.1	25.355	0.595	1564.9	
177	MARA50	3	32.4	346.2	93.4	52.3	352.1	162.7	514.8	227.9	61.667	1.148	2440.0	
178	SANTA60	3	52.0	214.8	93.2	65.2	470.5	175.9	646.4	194.7	35.399	0.728	2089.1	
179	CHICHA10	5	17.8	614.9	91.4	29.2	186.4	270.7	457.1	149.0	54.306	0.816	1630.2	
180	ARMA20	1	9.4	1164.0	90.8	0.0	0.0	232.1	232.1	97.4	98.425	0.767	1072.7	
181	COTAH20	4	30.3	359.7	90.8	0.0	0.0	316.7	316.7	105.1	77.874	0.682	1157.5	
182	PISCO070	1	30.2	359.7	90.5	76.9	477.1	244.2	721.3	102.0	14.716	0.410	1127.1	CHAL010
183	OYU10	2	5.7	1879.0	89.3	52.4	247.5	89.6	337.1	175.8	70.540	1.102	1968.6	
184	SANJU20	1	20.0	533.9	89.1	18.5	118.7	277.1	395.8	114.2	52.054	0.691	1281.7	
185	JORGE10	1	31.8	332.7	88.2	44.3	274.9	376.6	651.5	112.3	16.350	0.490	1273.2	CRIS10
186	CHANC10	1	9.2	1093.4	84.3	22.8	141.2	395.3	536.5	110.8	38.372	0.562	1314.4	
187	CANET40	3	20.3	481.9	81.7	25.9	174.9	235.6	410.5	167.9	65.775	1.003	2055.1	
188	MARA120	2	93.6	104.4	81.5	20.5	206.5	236.9	443.4	88.5	31.925	0.515	1085.9	
189	TAMBO100	1	54.3	179.9	81.5	45.4	281.9	276.0	557.9	212.6	89.068	1.060	2608.6	TAMBO10
190	TAMBO80	2	54.3	179.9	81.5	45.4	281.9	276.0	557.9	356.0	114.596	1.775	4368.1	TAMBO10
191	TAMBO90	1	54.3	179.9	81.5	45.4	281.9	276.0	557.9	170.9	81.628	0.852	2096.9	TAMBO10
192	PAUC270	2	61.0	157.4	80.1	64.7	648.5	7.6	656.1	297.4	53.476	1.326	3712.9	
193	SANTA40	10	18.3	524.0	80.1	80.0	576.2	46.9	623.1	277.3	50.113	1.186	3461.9	
194	SAMA20	1	30.0	314.8	78.8	8.3								

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA DESCENDENTE POR

RANK	PROYECTO	ALT.	QM (M**3/S)	HN (M)	PI (MW)	CON	EP (GWH)	FS (GWH)	ET (GWH)	INV (10**6 \$)	FFC (\$/MWH)	FFC1 (-)	KFSP (\$/KW)	PROYECTOS CONDICIONANTES
221	SONDO30	5	13.2	583.2	64.2	49.9	338.7	54.4	393.1	293.7	94.154	2.007	4574.8	
222	SANJU10	1	14.3	530.6	63.3	11.4	74.3	206.6	280.9	89.0	58.740	0.758	1406.0	
223	MARA160	1	107.3	68.3	61.1	12.6	125.8	272.8	398.6	70.6	31.569	0.485	1155.5	
224	TAMBO20	1	24.2	302.6	61.1	61.1	529.8	3.7	533.5	235.0	79.019	1.291	3846.2	TAMBO10
225	OTOCA10	1	9.6	754.4	60.4	60.4	529.0	0.0	529.0	56.6	24.195	0.318	937.1	URAB10
226	SANJU30	1	20.0	359.7	60.0	4.5	27.6	238.2	265.8	104.6	83.589	0.941	1743.3	
227	SANJU40	1	20.0	354.1	59.1	7.6	49.5	217.6	267.1	118.4	87.752	1.069	2003.4	
228	CHIN10	1	69.3	99.8	57.7	40.8	411.3	57.7	469.0	130.3	34.734	0.811	2258.2	
229	UCONA05	1	19.6	351.0	57.4	21.3	155.8	100.2	256.0	236.4	134.648	2.214	4118.5	
230	PISCO20	1	9.1	756.9	57.4	4.3	26.5	228.1	254.6	56.8	47.399	0.533	989.5	
231	CHIR10	1	26.0	264.1	57.3	18.9	125.6	330.4	456.0	80.8	32.597	0.515	1410.1	
232	CHAMA30	2	51.6	129.4	55.7	21.2	150.9	210.9	361.8	128.3	58.708	0.971	2303.4	
233	PALCA30	1	23.1	286.4	55.2	3.1	19.5	318.7	338.2	47.4	31.066	0.376	858.7	
234	CHON20	1	30.6	214.8	54.8	35.4	255.0	108.7	363.7	193.4	73.337	1.465	3529.2	
235	HUAN10	2	19.1	343.1	54.8	54.8	405.7	40.7	446.4	284.4	78.307	1.861	5189.8	
236	CASMA50	1	24.3	269.8	54.7	44.3	274.8	101.0	375.8	125.5	43.881	0.867	2294.3	CASMA10
237	JEFE10	1	123.0	53.3	54.7	9.0	89.7	249.4	339.1	85.4	46.724	0.679	1561.2	
238	MANI30	2	74.5	88.0	54.7	20.1	199.8	124.5	324.3	78.9	35.333	0.647	1442.4	
239	UTC30	1	50.0	131.1	54.7	33.5	336.2	51.2	387.4	186.3	60.410	1.352	3405.9	
240	TAB10	1	75.0	86.9	54.3	24.7	248.5	176.3	424.8	95.4	33.221	0.649	1756.9	
241	PISCO30	1	12.0	539.6	54.0	4.0	24.9	214.4	239.3	79.3	70.469	0.793	1468.5	
242	MARA150	1	104.0	61.8	53.6	8.8	89.3	197.1	286.4	49.4	30.872	0.443	921.6	
243	RIMAC10	1	5.1	1253.1	53.3	53.3	338.9	82.4	421.3	199.6	61.599	1.373	3744.8	
244	JEQUE50	3	32.5	196.3	53.2	30.7	247.4	67.5	314.9	189.2	60.598	1.596	3556.4	JFQUE10
245	SANTA90	5	73.5	86.2	52.8	14.4	145.8	185.7	331.5	97.7	39.124	0.650	1850.4	
246	HUAL150	3	236.0	26.7	52.5	2.8	27.9	297.3	325.2	49.3	32.747	0.409	939.0	
247	PISCO40	1	16.9	361.4	50.9	0.0	0.0	229.6	229.6	50.7	51.820	0.532	996.1	
248	RIMAC20	1	27.0	224.8	50.6	10.3	64.0	202.1	266.1	95.7	63.534	0.917	1891.3	
249	TAMBO110	1	56.5	107.5	50.6	26.4	268.6	110.1	378.7	167.9	94.144	1.235	3318.2	TAMBO10
250	CHAL10	1	20.2	294.8	49.8	27.7	193.2	82.7	275.9	135.3	67.664	1.275	2716.9	
251	LAMB10	1	17.2	346.7	49.8	0.0	0.0	315.8	315.8	37.9	28.166	0.326	761.0	
252	VIL10	9	21.6	275.6	49.6	32.3	244.9	85.1	330.0	167.3	68.278	1.398	3373.0	
253	VNOTA200	1	109.0	53.5	48.6	8.9	120.3	171.5	291.8	55.4	31.565	0.507	1139.9	
254	JEQUE10	2	8.5	674.5	47.8	28.6	177.7	100.2	277.9	73.8	37.981	0.701	1543.9	
255	ANDA30	1	6.5	875.8	47.5	7.1	44.0	193.2	237.2	28.6	23.861	0.302	602.1	
256	CHIN20	1	77.2	73.4	47.3	34.9	352.3	32.5	384.8	73.3	23.323	0.556	1549.7	
257	PARA20	1	7.2	765.8	46.3	0.0	0.0	133.7	133.7	71.0	124.603	1.012	1533.5	
258	CANET10	2	5.4	1022.2	45.6	45.6	341.9	11.9	353.8	290.2	85.316	2.062	6364.0	
259	CHICA20	2	50.6	105.5	44.5	20.9	189.4	80.3	269.7	256.8	27.859	2.549	5770.8	CRIS10
260	CHON10	1	24.1	220.6	44.3	32.6	232.3	63.2	295.5	72.4	32.190	0.676	1634.3	
261	QUIRU20	2	20.4	257.6	43.8	29.1	198.3	78.6	276.9	148.4	75.293	1.455	3388.1	
262	YAUCA20	2	7.4	699.5	43.2	14.7	70.9	82.4	153.3	148.1	154.000	1.985	3428.2	
263	APUR90	1	69.6	73.7	42.7	9.4	94.1	119.8	213.9	81.8	62.287	0.958	1915.7	
264	ANDA10	4	6.5	786.7	42.6	42.6	373.5	0.0	373.5	111.2	34.906	0.886	2610.3	
265	MARCA40	1	32.4	156.9	42.4	16.7	167.4	115.1	282.5	248.6	129.631	2.428	5863.2	
266	CHAMA10	2	29.2	169.9	41.4	37.9	286.0	35.0	321.0	239.7	92.676	2.153	5789.9	
267	SANTA30	3	32.3	151.0	40.7	23.6	188.0	98.0	286.0	112.9	44.336	0.878	2774.0	
268	JEQUE60	1	33.0	144.9	39.9	18.4	139.7	69.6	209.3	133.7	60.493	1.629	3350.9	JFQUE10
269	CHAMA50	2	87.0	54.6	39.6	19.7	175.6	86.8	262.4	84.6	45.293	0.888	2136.4	
270	ICHU20	1	13.2	352.4	38.8	18.5	122.5	84.5	207.0	94.0	66.918	1.164	2422.7	
271	CHAMA40	7	51.6	89.9	38.7	6.1	37.9	213.2	251.1	127.4	103.409	1.388	3292.0	
272	ANDA20	1	6.5	687.9	37.3	5.6	34.6	151.7	186.3	19.1	20.279	0.257	512.1	
273	UXA30	7	16.1	264.5	35.5	23.3	172.8	76.8	249.6	141.9	78.817	1.594	3997.2	
274	ICAT10	1	23.6	179.9	35.4	35.4	227.2	27.7	254.9	148.7	21.584	1.648	4200.6	CHALO10
275	TACNA30	1	4.3	976.3	35.0	20.9	129.9	110.1	240.0	44.7	28.376	0.519	1277.1	
276	CULCA60	8	46.4	89.9	34.8	1.7	10.4	177.4	187.8	70.5	83.439	0.966	2025.9	
277	CULCA30	1	32.1	128.8	34.5	23.1	166.8	84.6	251.4	221.8	121.050	2.500	6429.0	APU10
278	SANTA20	1	13.1	303.7	33.3	19.7	137.4	86.4	223.8	161.0	92.133	1.753	4834.8	
279	VIZCA10	2	15.6	248.0	32.4	13.3	91.6	76.7	168.3	121.4	109.619	1.833	3746.9	
280	CHICA10	4	7.0	527.9	30.8	21.0	139.3	39.5	178.8	178.2	131.387	2.630	5785.7	
281	PARA10	1	3.5	1030.9	30.4	14.4	22.7	48.6	71.3	110.4	275.395	2.775	3631.6	
282	MAN60	2	56.1	64.0	29.9	8.8	87.6	97.3	184.9	41.3	35.531	0.601	1381.3	
283	JFQUE70	1	33.5	105.1	29.4	12.7	121.7	43.1	164.8	14.4	11.826	0.229	489.8	AGRICULTURA
284	VIL20	1	37.2	94.0	29.2	8.0	76.1	87.6	163.7	75.2	73.558	1.199	2575.3	
285	CHICA30	2	51.9	67.3	29.1	10.8	110.6	58.1	168.7	102.8	18.784	1.607	3532.6	CRIS10
286	PUCH10	1	15.4	223.7	28.7	9.6	64.5	89.8	154.3	85.0	91.111	1.416	2961.7	
287	SANJU50	1	20.0	171.5	28.6	10.1	73.2	74.9	148.1	104.7	111.008	1.793	3660.8	
288	MOCHE20	3	5.8	582.8	28.3	1.3	7.8	117.9	125.7	50.0	87.871	0.951	1766.8	
289	TAMBO10	6	19.0	172.1	27.3	27.3	238.8	0.0	238.8	300.3	141.224	3.583	11000.0	
290	APUR25	1	57.3	56.7	27.1	13.2	133.5	27.8	161.3	39.2	31.211	0.647	1446.5	
291	SAMA40	1	30.0	107.9	27.0	27.0	236.5	0.0	236.5	68.8	70.356	0.866	2548.1	LOCUM10
292	PISCO10	1	9.1	353.1	26.8	15.4	111.5	33.7	145.2	143.0	124.395	2.417	5335.8	
293	SONDO20	8	6.8	458.7	26.0	16.3	109.2	45.5	154.7	109.8	97.568	1.889	4223.1	
294	JEQUE20	4	8.5	360.8	25.6	15.7	97.1	57.9	155.0	46.4	39.823	0.801	1812.5	JFQUE10
295	JEQUE30	1	8.5	359.7	25.5	16.2	100.3	59.2	159.5	68.1	46.514	1.155	2670.6	JFQUE10
296	CHILL20	2	8.4	359.7	25.3	6.8	42.4	118.8	161.2	54.5	62.842	0.920	2154.1	
297	HUAN20	1	23.4	129.4	25.2	15.1	107.6	72.0	179.6	143.1	116.857	2.242	5678.6	
298	JFQUE40	3	17.2	171.0	24.5	12.6	92.8	41.0	133.8	114.7	64.799	2.215	4681.6	JFQUE10
299	PAM101	1	44.8	64.7	24.2	8.9	89.5	50.5	140.0	56.3	57.548	1.061	2326.4	
300	CULCA40	1	32.1	89.9	24.1	13.5	84.1	80.5	164.6	181.3	142.337	3.063	7522.8	APU10
301	LLAU10	2	8.4	332.9	23.2	22.5	152.0	22.5	174.5	345.4	248.176	5.657	14887.9	
302	YAUCA10	2	5.4	507.3	22.8	7.8	38.6	35.1	73.7	182.7	372.865	4.828	8013.2	
303	TOTOR10	1	14.8	179.9	22.2	3.0	18.5	108.9	127.4	27.5	44.251	0.568	1238.7	
304	MAN70	2	58.8	44.3	21.7	8.4	85.0	49.1	134.1	37.0	39.578	0.742	1705.1	
305	CONAS10	1	14.2	180.5	21.4	19.6	141.0	19.2	160.2	114.7	89.307	2.043	5359.8	
306	COND10	1	7.5	306.4	19.2	10								

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA ASCENDENTE POR : FFC

CON 0.00 MW \$ PI \$= 5000.00 MW

RANK	PROYECTO	ALT.	QM (M**3/S)	HN (M)	PI (MM)	PACU (MM)	EP (GWH)	ET (GWH)	EACU (GWH)	INV (10**6 \$)	FFC (\$/MWH)	FFC1 (-)	KFSP (\$/KW)	PROYECTOS CONDICIONANTES
1	OLMOS10	1	32.4	396.9	107.4	107.4	439.8	749.3	749.3	35.7	7.047	0.133	332.4	AGRICULTURA
2	ENE40	2	1469.5	181.7	2227.1	2334.5	18650.8	18712.4	19461.7	1197.7	7.520	0.188	537.8	
3	MARA500	3	893.7	158.5	1181.3	3515.8	8537.0	9140.5	28602.2	657.8	8.730	0.207	556.8	
4	MARA570	5	2177.0	110.7	2009.3	5525.1	16733.2	16795.5	45397.7	1307.3	9.147	0.229	650.6	
5	INA200	4	857.0	189.6	1355.2	6880.3	9877.6	10530.8	55928.5	806.8	9.275	0.221	595.3	
6	HUAL170	6	765.0	131.7	840.6	7720.9	6996.9	7023.2	62951.7	589.0	9.855	0.247	700.7	
7	URUB320	5	624.2	180.8	941.2	8662.1	6727.5	7243.4	70195.1	598.8	10.055	0.238	636.2	
8	JEQUE70	1	33.5	105.1	29.4	8691.5	121.7	164.8	70359.8	14.4	11.826	0.229	489.8	AGRICULTURA
9	MARA440	3	428.8	176.0	629.4	9320.9	3980.5	4533.9	74893.7	438.1	12.071	0.273	696.1	
10	CHALO10	8	17.1	1061.4	151.4	9472.3	1325.3	1325.3	76218.9	139.5	12.345	0.313	921.4	AGRICULTURA
11	CRIS10	3	31.8	755.0	200.2	9672.5	1549.1	1600.0	77818.9	171.7	12.794	0.312	857.6	AGRICULTURA
12	HUAL190	2	1630.0	62.0	843.5	10516.0	5210.7	5993.3	83812.2	635.0	13.296	0.298	752.8	
13	HUAL90	9	149.5	642.8	801.4	11317.4	3987.3	5656.7	89468.9	548.9	13.352	0.272	684.9	
14	PISCO60	1	30.2	933.1	234.7	11552.1	1237.5	1845.6	91314.4	193.4	13.619	0.303	824.0	CHALO10
15	HUABA40	3	440.0	96.5	354.1	11906.2	1562.4	2427.3	93741.7	246.6	14.499	0.283	696.4	
16	MARA400	3	645.9	105.8	569.7	12475.9	1822.0	3653.1	97394.7	339.2	14.532	0.253	595.4	
17	PISCO70	1	30.2	359.7	90.5	12566.4	477.1	721.3	98116.0	102.0	14.716	0.410	1127.1	CHALO10
18	TAM40	4	2071.5	74.5	1286.5	13852.9	3445.8	8324.8	106440.7	827.5	15.321	0.272	643.2	
19	INA90	2	323.4	149.1	402.1	14295.0	1644.3	2703.2	109143.9	290.9	15.697	0.298	723.5	
20	APUR737	3	544.8	199.3	905.3	15160.3	4864.5	6442.0	115585.9	771.2	16.001	0.337	851.9	
21	ALMAD10	2	249.0	131.9	273.9	15434.2	1787.7	2010.3	117596.2	259.8	16.049	0.367	948.5	
22	MARA290	3	262.0	130.2	284.6	15718.8	1168.1	1914.7	119510.9	211.5	16.092	0.306	743.1	
23	MAN270	2	307.5	111.3	285.5	16004.3	1011.5	1737.3	121248.1	190.1	16.228	0.293	665.8	
24	JORGE10	1	31.8	332.7	88.2	16092.5	274.9	651.5	121899.6	112.3	16.350	0.490	1273.2	CRIS10
25	URUB88	1	148.8	321.3	398.7	16491.2	351.0	2385.9	124285.5	196.3	16.829	0.219	492.4	
26	MAN250	1	282.5	184.4	434.4	16925.6	1791.5	2639.6	126925.1	319.2	16.901	0.324	734.8	
27	MO10	1	16.6	2140.5	296.3	17221.9	1239.8	1813.8	128733.8	221.3	17.004	0.328	746.9	
28	MAN290	1	337.9	150.1	423.1	17645.0	1943.4	2739.4	131478.2	346.7	17.367	0.346	819.4	
29	PAM240	7	175.4	908.7	1329.3	18974.3	8503.7	9640.8	141118.9	1348.0	17.429	0.396	1014.1	
30	HUAL210	2	2125.0	61.8	1095.2	20069.5	2419.0	6804.6	147923.5	688.0	17.498	0.273	628.2	
31	VNOTA295	14	131.0	778.0	850.0	20919.5	727.5	7307.5	155231.0	1098.0	17.660	0.445	1291.8	
32	APUR765	1	760.7	50.0	317.3	21236.8	598.1	1967.8	157198.7	194.3	17.763	0.266	612.4	
33	APUR660	5	315.5	158.8	417.8	21654.6	1151.4	2752.6	159951.3	297.2	17.861	0.297	711.3	
34	PER70	8	314.0	151.0	395.6	22050.2	2909.4	3037.7	163039.0	462.1	18.076	0.432	1168.1	
35	MARA350	4	294.7	136.2	334.7	22384.9	1472.0	2292.8	165331.7	293.6	18.297	0.356	877.2	
36	MAN230	2	162.0	147.3	199.0	22583.9	685.3	1172.1	166503.8	144.9	18.305	0.328	728.1	
37	CHICA30	2	51.9	67.3	29.1	22612.9	110.6	168.7	166672.5	102.8	18.784	1.607	3532.6	CRIS10
38	MAN320	2	358.5	88.3	263.9	22876.8	945.0	1608.0	163280.5	204.5	18.790	0.341	774.9	
39	MARA200	1	162.0	75.1	101.4	22978.2	265.4	663.9	168944.4	75.1	18.952	0.310	740.6	
40	MAN260	3	286.0	132.2	315.2	23293.4	1113.5	1917.3	170861.6	245.2	18.981	0.343	777.9	
41	TULU20	2	51.0	389.1	165.5	23458.9	280.7	1079.2	171940.8	111.1	19.168	0.282	671.3	
42	HUAL140	1	231.5	105.7	204.1	23663.0	507.2	1273.4	173214.2	147.9	19.491	0.314	724.6	
43	MARA460	2	463.9	123.2	476.5	24139.5	2847.1	3370.1	176584.2	521.7	19.685	0.435	1094.9	
44	MARA320	3	281.8	144.1	338.7	24478.2	1026.6	2153.8	178738.0	267.1	19.702	0.337	788.6	
45	URUB190	4	178.0	324.4	481.6	24959.8	2478.6	3421.2	182159.2	496.7	19.752	0.408	1031.4	
46	MARA300	2	269.0	113.1	253.7	25213.5	515.1	1574.5	183733.7	178.1	19.999	0.305	702.0	
47	MARA210	1	211.0	97.2	171.0	25384.5	645.1	1186.3	184919.9	156.3	20.018	0.368	914.0	
48	MARA230	2	222.6	106.1	196.9	25581.4	581.0	1310.4	186230.3	162.6	20.168	0.342	825.8	
49	PISCO80	2	47.1	359.7	141.2	25722.6	535.6	945.2	187175.5	216.8	20.233	0.634	1535.4	CHALO10
50	MARA180	5	109.4	176.3	160.9	25883.5	349.4	1049.2	188224.7	120.8	20.270	0.316	750.8	
51	MARA410	2	360.6	88.1	265.0	26148.5	732.1	1666.3	189890.9	207.2	20.270	0.337	781.9	
52	ANDA20	1	6.5	687.9	37.3	26185.8	34.6	186.3	190077.2	19.1	20.279	0.257	512.1	
53	FULA30	1	32.0	452.7	120.8	26306.6	779.6	872.7	190949.9	125.7	20.511	0.407	1040.6	FULA10
54	INA65	1	159.0	130.1	172.6	26479.2	912.8	1230.2	192180.1	189.1	20.698	0.433	1095.6	
55	MAN190	2	148.6	129.6	160.7	26639.9	593.5	954.4	193134.4	137.5	20.833	0.383	855.6	
56	SGAB10	2	49.8	940.7	390.7	27030.6	583.3	2037.9	195222.3	241.0	21.166	0.296	616.8	
57	FULA10	1	38.0	1044.2	330.9	27361.5	2501.3	2501.3	197723.6	456.1	21.390	0.522	1378.4	AGUA POTABLE
58	APUR717	1	335.1	94.3	263.6	27625.1	447.0	1634.1	199357.6	191.2	21.549	0.316	725.3	
59	ICA10	1	23.6	179.9	35.4	27660.5	227.2	254.9	199612.5	148.7	21.584	1.648	4200.6	CHALO10
60	INA80	1	167.0	119.1	165.9	27826.4	553.5	1071.3	200683.7	151.9	21.939	0.387	915.6	
61	TAM60	2	2172.5	32.0	579.8	28406.2	1948.0	3748.5	204432.2	534.3	22.002	0.390	921.5	
62	HUAL120	2	208.5	201.0	349.5	28755.7	410.2	2166.0	206598.2	241.7	22.011	0.301	691.6	
63	MAN210	5	156.1	89.9	117.1	28872.8	398.4	689.3	207287.5	104.0	22.441	0.400	888.1	
64	EULA20	1	32.0	854.3	228.0	29100.8	1471.3	1647.0	208934.5	325.2	22.571	0.558	1426.3	FULA10
65	APUR240	6	221.0	65.0	119.8	29220.6	239.4	781.3	209715.7	98.2	22.580	0.345	819.7	
66	MAN340	5	376.4	114.6	359.8	29580.4	1022.7	2046.5	211762.2	297.1	22.708	0.381	825.7	
67	INA140	1	336.0	39.6	110.9	29691.3	83.5	687.1	212449.3	75.1	22.854	0.295	677.2	
68	SALC40	2	49.0	456.6	186.6	29877.9	848.4	1145.7	213595.0	194.6	22.891	0.457	1042.9	
69	CHIN20	1	77.2	73.4	47.3	29925.2	352.3	314.8	213979.7	73.3	23.323	0.556	1549.7	
70	ANDA30	1	6.5	875.8	47.5	29972.7	44.0	237.2	214216.9	28.6	23.861	0.302	602.1	
71	MAN105	1	154.9	136.3	176.1	30148.8	791.0	1110.4	215327.3	194.0	23.931	0.474	1101.6	
72	INA85	1	250.0	88.4	184.3	30333.1	574.0	1176.8	216504.1	179.8	24.096	0.416	975.6	
73	PACHA70	2	129.1	500.3	538.7	30871.8	1345.4	3361.5	219865.6	484.2	24.135	0.389	898.8	
74	OTUCA10	1	9.6	754.4	60.4	30932.2	529.0	529.0	220394.6	56.6	24.195	0.318	937.1	URAB10
75	APUR734	1	522.7	52.0	226.7	31158.9	211.3	1404.9	221799.4	167.1	24.258	0.321	737.1	
76	URUB250	1	236.4	56.8	112.0	31270.9	337.8	711.8	222511.2	109.4	24.453	0.418	976.8	
77	MAN170	8	138.6	120.6	139.4	31410.3	648.5	887.8	223398.9	160.1	24.457	0.491	1148.5	
78	PAT110	1	18.9	679.9	107.3	31517.6	264.1	657.3	224056.2	96.5	24.559	0.394	899.3	
79	APUR670	1	323.0	155.7	419.3	31936.9	1088.6	2620.7	226676.9	389.0	24.600	0.401	927.7	
80	PALCA15	2	22.4	655.5	122.5	32059.4	207.7	798.6	227475.4	105.6	24.610	0.362	862.0	
81														

LISTADO DE LOS PROYECTOS HIDROELECTRICOS

ORDENADO EN FORMA ASCENDENTE POR : FFC CON

0.00 MW \$ PI \$= 5000.00 MW

RANK	PROYECTO	ALT.	QM (M**3/S)	HN (M)	PI (MW)	PACU (MW)	EP (GWH)	FT (GWH)	FACU (GWH)	INV (10**6 \$)	FFC (\$/MWH)	FFC1 (-)	KFSP (\$/KW)	PROYECTOS CONDICIONANTES
111	APUR680	4	325.7	225.2	611.8	38545.6	1514.9	3816.8	268792.3	694.1	30.538	0.492	1134.5	
112	SGAB30	3	62.0	914.4	472.8	39018.4	1248.2	2958.0	271750.3	547.8	30.552	0.501	1158.6	
113	MARA150	1	104.0	61.8	53.6	39072.0	89.3	286.4	272036.7	49.4	30.872	0.443	921.6	
114	PALCA30	1	23.1	286.4	55.2	39127.2	19.5	338.2	272374.9	47.4	31.066	0.376	858.7	
115	INA30	8	63.3	495.9	261.8	39389.0	1577.8	1851.8	274226.6	455.0	31.125	0.690	1738.0	
116	APUR25	1	57.3	56.7	27.1	39416.1	133.5	161.3	274387.9	39.2	31.211	0.647	1446.5	
117	LAMB50	1	41.1	422.7	144.8	39560.9	186.6	845.7	275233.6	137.4	31.224	0.430	948.9	
118	URAB10	3	9.6	1228.8	98.4	39659.3	861.6	861.6	276095.1	230.3	31.350	0.795	2340.4	
119	PAM180	11	146.2	371.2	452.6	40111.9	2910.2	3698.0	279793.1	885.0	31.418	0.700	1955.4	
120	CASMA30	1	20.0	934.6	155.9	40267.8	865.7	1027.3	280820.4	180.7	31.564	0.484	1159.1	CASMA10
121	VNOTA200	1	109.0	53.5	48.6	40316.4	120.3	291.8	281112.1	55.4	31.565	0.507	1139.9	
122	MARA160	1	107.3	68.3	61.1	40377.5	125.8	398.6	281510.7	70.6	31.569	0.485	1155.5	
123	MARA120	2	93.6	104.4	81.5	40459.0	206.5	443.4	281954.1	88.5	31.925	0.515	1085.9	
124	CHON10	1	24.1	220.6	44.3	40503.3	232.3	295.5	282249.6	72.4	32.190	0.676	1634.3	
125	CORAL10	1	13.0	1424.4	154.4	40657.7	546.8	813.5	283063.1	189.8	32.212	0.586	1229.3	
126	OTOCA20	1	11.6	713.9	69.1	40726.8	526.5	576.6	283639.6	157.9	32.224	0.805	2285.1	URAB10
127	MAJES10	1	34.0	745.6	211.4	40938.2	727.5	1353.4	284993.0	190.6	32.301	0.584	901.6	APUTO
128	CHIR10	1	26.0	264.1	57.3	40995.5	125.6	456.0	285448.9	80.8	32.597	0.515	1410.1	
129	SANTA110	11	86.9	278.8	202.1	41197.6	410.6	1268.6	286717.5	233.4	32.601	0.498	1154.9	
130	HUAL150	3	236.0	26.7	52.5	41250.1	27.9	325.2	287042.7	49.3	32.747	0.409	939.0	
131	TAB10	1	75.0	86.9	54.3	41304.4	248.5	424.8	287467.4	95.4	33.221	0.649	1756.9	
132	HUA10	1	10.2	898.2	76.7	41381.1	193.4	524.9	287992.3	102.9	33.604	0.545	1341.6	
133	POZ27	2	62.2	458.4	237.8	41618.9	340.2	1473.7	289466.0	263.6	34.088	0.482	1108.5	
134	MARA130	4	100.2	220.2	184.0	41802.9	275.3	983.3	290449.2	183.2	34.152	0.478	995.7	
135	TACNA50	1	4.3	321.5	11.5	41814.4	42.8	79.1	290528.3	17.8	34.349	0.628	1547.8	
136	CHIN10	1	69.3	99.8	57.7	41872.1	411.3	469.0	290997.3	130.3	34.734	0.811	2258.2	
137	PAT120	1	22.5	735.3	138.0	42010.1	717.7	941.2	291938.5	246.7	34.887	0.728	1787.7	
138	ANDA10	4	6.5	786.7	42.6	42052.7	373.5	373.5	292312.0	111.2	34.906	0.886	2610.3	
139	CANFT110	4	41.6	465.4	161.5	42214.2	198.8	801.6	293113.6	148.9	34.917	0.464	922.0	
140	CANFT80	1	31.8	382.2	101.5	42315.7	124.9	503.7	293617.2	93.9	35.020	0.465	925.1	
141	TACNA40	1	4.3	357.6	12.8	42328.5	47.6	88.0	293705.2	20.3	35.133	0.642	1585.9	
142	MAN130	2	74.5	88.0	54.7	42385.2	199.8	324.3	294029.5	78.9	35.333	0.647	1442.4	
143	TULU10	1	41.1	453.6	155.5	42538.7	303.1	832.0	294861.5	171.1	35.351	0.528	1100.3	
144	SANTA60	3	52.0	214.8	93.2	42631.9	470.5	646.4	295507.9	194.7	35.399	0.728	2089.1	
145	MAN60	2	56.1	64.0	29.9	42661.8	87.6	184.9	295692.7	41.3	35.531	0.601	1381.3	
146	OLMOS20	1	32.4	269.8	73.0	42734.8	173.3	501.7	296194.4	103.9	36.104	0.577	1423.3	
147	TAMB070	2	50.7	809.4	342.2	43077.0	1253.7	2384.9	298579.3	349.1	36.283	0.409	1020.2	TAMBO10
148	MAN90	4	134.6	130.9	146.9	43223.9	763.6	973.3	299552.6	271.6	36.688	0.769	1848.9	
149	SANTA120	13	100.9	409.4	344.5	43568.4	1391.5	2198.7	301751.2	579.2	36.811	0.697	1681.3	
150	VILCA170	8	69.4	505.9	293.0	43861.4	1037.8	1683.6	303434.8	439.9	37.926	0.687	1501.4	
151	JEQUF10	2	8.5	674.5	47.8	43909.2	177.7	277.9	303712.7	73.8	37.981	0.701	1543.9	
152	APURI148	2	88.2	293.0	215.5	44124.7	737.6	1230.5	304943.2	319.3	38.060	0.681	1481.7	
153	TACNA20	1	4.3	482.9	17.3	44142.0	64.2	118.7	305061.9	29.8	38.199	0.698	1722.5	
154	CHIL130	1	12.9	645.3	69.5	44211.5	179.7	348.5	305410.4	90.0	38.330	0.621	1295.0	
155	CHANC10	1	9.2	1093.4	84.3	44295.8	141.2	536.5	305946.9	110.8	38.372	0.562	1314.4	
156	LAMB20	1	30.2	269.3	67.9	44363.7	291.2	426.4	306373.2	119.2	38.992	0.757	1755.5	
157	SANTA90	5	73.5	86.2	52.8	44416.5	145.8	331.5	306704.7	97.7	39.124	0.650	1850.4	
158	APUR250	5	226.7	162.0	306.4	44722.9	556.4	1998.0	308702.7	429.7	39.463	0.589	1402.4	
159	PALCA10	7	15.5	1143.3	147.8	44870.7	715.2	920.7	309623.4	275.2	39.454	0.807	1862.0	
160	MARCA50	4	51.0	434.1	184.7	45055.4	1088.7	1305.8	310929.2	403.8	39.559	0.868	2186.2	
161	MAN70	2	58.8	44.3	21.7	45077.1	85.0	134.1	311063.2	37.0	39.578	0.742	1705.1	
162	TAMB050	2	31.5	544.1	142.9	45220.0	789.7	1136.7	312199.9	120.1	39.779	0.307	340.4	TAMBO10
163	JEQUF20	4	8.5	360.8	25.6	45245.6	97.1	155.0	312354.9	46.4	39.823	0.801	1812.5	JEQUF10
164	PAM125	8	89.8	257.5	192.8	45438.3	1636.2	1653.9	314008.8	562.7	40.126	1.007	2918.6	
165	CHEC10	1	6.6	1246.0	68.4	45506.7	319.2	472.9	314481.7	136.5	40.442	0.806	1995.6	
166	CHAN30	4	77.1	150.6	96.8	45603.5	441.2	669.2	315150.9	191.5	40.459	0.798	1978.3	
167	CANET60	1	31.8	427.2	113.4	45716.9	139.6	563.0	315713.8	122.7	40.964	0.544	1032.0	
168	CHAL50	9	35.4	503.9	148.8	45865.7	524.6	854.2	316568.0	242.9	41.325	0.748	1632.4	
169	SANTA145	5	130.0	251.7	272.9	46138.6	1578.7	1852.1	318420.1	620.3	42.418	0.929	2273.0	
170	MAN80	3	92.5	87.8	67.7	46206.3	245.9	413.4	318833.4	120.8	42.982	0.784	1784.3	
171	MANA10	4	9.8	954.6	77.9	46284.2	79.0	423.6	319257.0	92.4	43.140	0.563	1186.1	
172	OXA20	9	11.5	1164.4	111.7	46395.9	358.3	753.0	320010.0	204.8	43.227	0.753	1833.5	
173	POZ20	7	48.6	237.4	96.2	46492.1	675.1	733.8	320743.7	261.6	43.557	1.023	2719.3	
174	COLCA10	1	11.2	171.0	16.0	46508.1	89.1	105.4	320849.1	36.1	43.584	0.943	2256.3	AGRICULTURA
175	UTC70	1	88.5	135.8	100.2	46608.3	576.4	708.7	321557.8	239.2	43.672	0.948	2387.2	
176	STOM120	4	83.0	257.2	178.0	46786.3	302.0	1160.8	322718.6	273.0	43.784	0.645	1533.7	
177	CASMA50	1	24.3	269.8	54.7	46841.0	274.8	375.8	323094.3	125.5	43.881	0.867	2294.3	CASMA10
178	TOTOR10	1	14.8	179.9	22.2	46863.2	18.5	127.4	323221.7	27.5	44.251	0.568	1238.7	
179	SANTA30	3	32.3	151.0	40.7	46903.9	188.0	286.0	323507.7	112.9	44.336	0.878	2774.0	
180	RAPAY10	1	17.8	701.5	104.3	47008.2	174.8	664.1	324171.7	159.0	44.463	0.651	1524.4	
181	TABLA20	1	27.5	421.1	96.6	47104.8	340.7	576.3	324748.0	182.2	44.497	0.804	1886.1	
182	TULU70	1	116.0	205.3	198.6	47303.4	497.2	1239.8	325987.7	331.0	44.711	0.722	1666.7	
183	CASMA10	2	20.0	672.4	112.2	47415.6	574.3	745.0	326732.7	269.8	44.712	0.930	2404.6	
184	STOMB5A	2	69.6	289.1	167.7	47583.3	592.6	963.3	327696.0	299.9	45.220	0.819	1788.3	
185	CHAMA50	2	87.0	54.6	39.6	47622.9	175.6	262.4	327958.4	84.6	45.293	0.888	2136.4	
186	JEQUE30	1	8.5	359.7	25.5	47648.4	100.3	159.5	328117.9	68.1	46.514	1.155	2670.6	JEQUF10
187	JEPE10	1	123.0	53.3	54.7	47703.1	89.7	339.1	328456.9	85.4	46.724	0.679	1561.2	
188	LAMB30	1	34.2	394.7	112.6	47815.7	215.7	643.1	329100.0	171.9	46.943	0.701	1526.6	
189	CASMA60	1	24.3	80.9	16.4	47832.1	82.4	113.6	329213.6	54.6	47.377	1.341	3329.3	CASMA10
190	PISCO20	1	9.1	756.9	57.4	47889.5	26.5	254.6	329468.1	56.8	47.399	0.533	989.5	

MINISTERIO DE ENERGIA Y MINAS
 CONSORCIO LAHMEYER - SALZGITTER
 PROYECTO DE EVALUACION DEL POTENCIAL HIDROELECTRICO DEL PERU

TABLA 6-4 3/3
 FECHA : 10/ 2/81

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA ASCENDENTE POR : FFC CON

RANK	PROYECTO	ALT.	QM (M**3/S)	HN (M)	PI (MW)	PACU (MW)	EP (GWH)	ET (GWH)	EACU (GWH)	INV (10**6 \$)	FFC (\$/MWH)	FFCI (-)	RESP (\$/KW)	PROYECTOS CONDICIONANTES
221	CHAMA30	2	51.6	129.4	55.7	51742.8	150.9	361.8	353271.8	128.3	58.708	0.971	2303.4	
222	SANJU10	1	14.3	530.6	63.3	51806.1	74.3	280.9	353552.7	89.0	58.740	0.758	1406.0	
223	MARAB0	4	76.3	249.6	158.8	51964.8	787.8	995.5	354548.2	448.7	59.030	1.220	2825.6	
224	URUM15	10	21.2	563.4	99.6	52064.4	544.8	695.1	355243.2	312.3	59.082	1.257	3135.5	
225	VNOTA60	2	91.1	97.6	74.1	52138.5	489.0	538.4	355781.6	258.8	59.101	1.361	3492.6	
226	SAMA30	1	30.0	314.8	78.8	52217.3	51.5	361.5	356143.1	104.6	59.424	0.702	1327.4	
227	OCONA70	2	89.7	217.8	163.0	52380.3	723.2	984.6	357127.7	437.6	60.117	1.189	2684.7	
228	UTC30	1	50.0	131.1	54.7	52435.0	336.2	387.4	357515.1	186.3	60.410	1.352	3405.9	
229	JEQUE60	1	33.0	144.9	39.9	52474.9	139.7	209.3	357724.3	133.7	60.493	1.629	3350.9	JFQUE10
230	JEQUE50	3	32.5	196.3	53.2	52528.1	247.4	314.9	358039.2	189.2	60.598	1.596	3556.4	JFQUE10
231	RIMAC10	1	5.1	1253.1	53.3	52581.4	338.9	421.3	358460.4	199.6	61.599	1.373	3744.8	
232	CANET90	10	31.8	283.3	75.2	52656.6	92.6	375.4	358833.8	122.4	61.605	0.819	1627.7	
233	MARA50	3	32.4	346.2	93.4	52750.0	352.1	514.8	359348.6	227.9	61.667	1.148	2440.0	
234	SAMA20	1	30.0	314.8	78.8	52828.8	51.5	361.5	359710.1	109.0	61.907	0.731	1383.2	
235	VNOTA90	2	94.4	165.5	130.3	52959.1	538.1	776.5	360486.6	347.9	62.090	1.193	2670.0	
236	COLCA70	1	52.9	269.8	119.1	53078.2	35.7	642.5	361129.1	179.6	62.141	0.720	1508.0	
237	APUR90	1	69.6	73.7	42.7	53120.9	94.1	213.9	361342.9	81.8	62.287	0.958	1915.7	
238	CHILL20	2	8.4	359.7	25.3	53146.2	42.4	161.2	361504.1	54.5	62.842	0.920	2154.1	
239	RIMAC20	1	27.0	224.8	50.6	53196.8	64.0	266.1	361770.2	95.7	63.534	0.917	1891.3	RIMAC10
240	CHIL120	1	8.3	223.8	15.5	53212.3	83.5	97.6	361867.7	122.3	64.120	1.375	7890.3	
241	JFQUE40	3	17.2	171.0	24.5	53236.8	92.8	133.8	362001.5	114.7	64.799	2.215	4681.6	JFQUE10
242	SGAB60	4	75.0	109.3	68.3	53305.1	198.8	432.5	362434.0	175.5	65.211	1.102	2569.5	
243	YANA10	3	32.0	274.9	73.4	53378.5	138.4	478.5	362912.5	172.5	65.599	0.988	2350.1	
244	CANET40	3	20.3	481.9	81.7	53460.2	174.9	410.5	363323.0	167.9	65.775	1.003	2055.1	
245	COTAH25	6	33.0	585.0	161.0	53621.2	715.0	972.7	364295.7	473.7	65.854	1.303	2942.2	
246	APUR115	1	72.8	249.1	151.3	53772.5	176.5	808.3	365103.9	276.9	65.956	0.879	1830.1	
247	PAM84	1	36.6	59.4	18.1	53790.6	66.7	104.9	365208.8	48.3	66.035	1.214	2668.5	
248	OCONA15	1	20.0	772.3	128.8	53919.4	464.5	641.1	365849.9	312.3	66.254	1.218	2424.7	
249	ICHU20	1	13.2	352.4	38.8	53958.2	122.5	207.0	366056.9	94.0	66.918	1.164	2422.7	
250	CHAL10	1	20.2	294.8	49.8	54008.0	193.2	275.9	366332.7	135.3	67.664	1.275	2716.9	
251	VIL10	9	21.6	275.6	49.6	54057.6	244.9	330.0	366662.7	167.3	68.278	1.398	3373.0	
252	CHILL10	1	8.4	940.6	66.2	54123.8	71.3	353.4	367016.1	123.7	68.314	0.897	1868.6	
253	COLCA50	2	37.0	539.6	166.5	54290.3	49.9	898.2	367914.3	276.8	68.496	0.793	1662.5	
254	ANTA27	2	33.9	379.5	107.3	54397.6	279.2	585.6	368499.9	254.4	69.014	1.123	2370.9	
255	VILCA120	6	46.1	367.7	141.4	54539.0	663.5	874.5	369374.4	453.4	69.154	1.397	3206.5	
256	TAMBO30	1	31.5	359.7	94.5	54633.0	522.1	751.5	370125.9	231.1	69.478	0.893	2445.5	TAMBO10
257	SANTA80	5	62.7	215.8	112.9	54746.4	229.5	708.7	370834.6	278.1	69.541	1.063	2463.2	
258	SAMA40	1	30.0	107.9	27.0	54773.4	236.5	236.5	371071.1	68.8	70.356	0.866	2548.1	LOCUM10
259	PISCO30	1	12.0	539.6	54.0	54827.4	24.9	239.3	371310.3	79.3	70.469	0.793	1468.5	
260	OYO10	2	5.7	1879.0	89.3	54916.7	247.5	337.1	371647.4	175.8	70.540	1.102	1968.6	
261	SAMA50	1	33.2	60.9	16.9	54933.6	147.8	147.8	371795.1	30.5	70.615	0.464	1804.7	LOCUM10
262	MALAZ0	1	16.0	539.6	72.0	55005.6	33.2	319.1	372114.2	106.7	71.075	0.800	1481.9	
263	CHOTA10	1	17.2	108.0	15.5	55021.1	76.6	108.3	372222.4	57.1	72.457	1.476	3685.9	
264	LOCUM10	1	32.5	1355.9	367.5	55388.6	3218.7	3218.7	375441.1	1357.6	73.018	1.853	3694.1	
265	QUIRO20	2	20.4	257.6	43.8	55432.4	198.3	276.9	375718.0	148.4	73.293	1.455	3388.1	
266	CHON20	1	30.6	214.8	54.8	55487.2	255.0	363.7	376081.7	193.4	73.337	1.465	3529.2	
267	VIL20	1	37.2	94.0	29.2	55516.4	76.1	163.7	376245.4	75.2	73.558	1.199	2575.3	
268	COTAH20	4	30.3	359.7	90.8	55607.2	0.0	316.7	376562.1	105.1	77.874	0.682	1157.5	
269	HUAN10	2	19.1	343.1	54.8	55662.0	405.7	446.4	377008.4	284.4	78.307	1.861	5189.8	
270	OXA30	7	16.1	264.5	35.5	55697.5	172.8	249.6	377258.0	141.9	78.817	1.594	3997.2	
271	TAMBO20	1	24.2	302.6	61.1	55758.6	529.8	533.5	377791.5	235.0	79.019	1.291	3846.2	TAMBO10
272	APUR810	2	818.3	61.5	420.1	56178.7	957.2	2612.7	380404.2	1208.8	79.436	1.249	2877.4	
273	OCONA35	3	37.0	500.4	154.4	56333.1	395.0	769.9	381174.1	397.6	80.080	1.292	2575.1	
274	OCONA60	1	86.5	197.3	142.4	56475.5	450.5	762.9	381936.9	415.3	80.308	1.398	2916.4	
275	OCONA80	1	89.7	127.9	93.7	56571.2	164.0	442.8	382379.7	208.2	80.481	1.144	2175.5	
276	ICHU20	9	28.8	440.9	105.9	56677.1	363.2	604.9	382984.6	333.2	80.745	1.445	3146.4	
277	TAMBO90	1	54.3	179.9	81.5	56758.6	281.9	557.9	383542.4	170.9	81.628	0.852	2096.9	TAMBO10
278	COLCA80	3	60.8	224.8	114.0	56872.6	105.6	569.5	384111.9	238.4	82.848	1.048	2091.2	
279	MAL10	1	16.0	584.5	78.0	56950.6	35.9	345.6	384457.4	142.1	82.990	0.934	1821.8	
280	COLCA60	8	46.4	89.9	34.8	56985.4	10.4	187.8	384645.2	70.5	83.439	0.966	2025.9	
281	SANJU30	1	20.0	359.7	60.0	57045.4	27.6	265.8	384910.9	104.6	83.589	0.941	1743.3	
282	BLANC10	1	3.9	390.1	12.7	57058.1	71.6	81.7	384992.6	89.5	84.615	1.847	7047.2	
283	CANET10	2	5.4	1022.2	45.6	57103.7	341.9	353.8	385346.4	290.2	85.316	2.062	6364.0	
284	CHILL30	1	8.4	179.9	12.7	57116.4	21.2	80.6	385426.9	37.0	85.322	1.250	2913.4	
285	TACNA10	1	4.3	472.0	16.9	57133.2	136.0	138.2	385565.1	100.2	85.670	2.118	5929.0	
286	OYO20	1	7.9	972.5	64.2	57197.4	0.0	164.3	385729.4	61.0	87.043	0.678	950.2	
287	SANJU40	1	20.0	354.1	59.1	57256.5	49.5	267.1	385996.4	118.4	87.752	1.069	2003.4	
288	MOCHE20	3	5.8	582.8	28.3	57284.8	7.8	125.7	386122.1	50.0	87.871	0.951	1766.8	
289	COTAH10	3	21.5	562.2	100.8	57385.6	309.3	459.0	386581.1	291.2	88.899	1.533	2888.9	
290	TAMBO100	1	54.3	179.9	81.5	57467.1	281.9	557.9	387139.0	212.6	89.068	1.060	2608.6	TAMBO10
291	CONAS10	1	14.2	180.5	21.4	57488.5	141.0	160.2	387299.2	114.7	89.307	2.043	5359.8	
292	FUCH10	1	15.4	223.7	28.7	57517.2	64.5	154.3	387453.4	85.0	91.111	1.416	2961.7	
293	SANTA20	1	13.1	303.7	33.3	57550.5	137.4	223.8	387677.2	161.0	92.133	1.753	4834.8	
294	CHAMA10	2	29.2	169.9	41.4	57591.9	286.0	321.0	387998.2	239.7	92.676	2.153	5789.9	
295	SANTA70	3	52.0	170.9	74.1	57666.0	136.0	456.7	388454.9	236.6	93.647	1.395	3193.0	
296	TAMBO110	1	56.5	107.5	50.6	57716.6	268.6	378.7	388833.6	167.9	94.144	1.235	3314.2	TAMBO10
297	SOND030	5	13.2	583.2	64.2	57780.8	338.7	393.1	389226.6	293.7	94.154	2.007	4578.8	
298	STOM30	1	25.7	300.2	64.4	57845.2	223.0	368.3	389594.9	238.0	94.427	1.698	3695.7	
299	PISCO50	1	16.9	539.6	76.1	57921.3	0.0	342.8	389937.6	140.5	96.131	0.987	1846.3	
300	CHOTA30	2	17.5	105.8	15.4	57936.7	95.5	113.9	390051.5	86.6	96.996	2.161	5623.4	
301	SOND020	8	6.8	458.7	26.0	57962.7	109.2	154.7	390206.2	109.8	97.568	1.889	4223.1	
3														

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA ASCENDENTE POR : FFC1 CON 0.00 MW \$ PI \$= 5000.00 MW

RANK	PROYECTO	ALT. (M)	QM (M**3/S)	HN (M)	PI (MW)	PACU (MW)	FP (GWH)	ET (GWH)	EACU (GWH)	INV (10**6 \$)	FFC (\$/MWH)	FFC1 (-)	KFSP (\$/KW)	PROYECTOS CONDICIONANTES
1	OLMOS10	1	32.4	396.9	107.4	107.4	439.8	749.3	749.3	35.7	7.047	0.133	332.4	AGRICULTURA
2	FNFA0	2	1469.5	181.7	2227.1	2334.5	18650.8	18712.4	19461.7	1197.7	7.520	0.188	537.8	
3	MARA500	3	893.7	158.5	1181.3	3515.8	8537.0	9140.5	28602.2	657.8	8.730	0.207	556.8	
4	URUB88	1	148.8	321.3	398.7	3914.5	351.0	2385.9	30988.1	196.3	16.829	0.219	492.4	
5	INA200	4	857.0	189.6	1355.2	5269.7	9877.6	10530.8	41518.9	806.8	9.275	0.221	595.3	
6	JQUE70	1	33.5	105.1	29.4	5299.1	121.7	164.8	41683.7	14.4	11.826	0.229	489.8	AGRICULTURA
7	MARA570	5	2177.0	110.7	2009.3	7303.4	16733.2	16795.5	58479.2	1307.3	9.147	0.229	650.6	
8	URUB320	5	624.2	180.8	941.2	8249.6	6727.5	7243.4	65722.6	598.8	10.055	0.238	636.2	
9	HUAL170	6	765.0	131.7	840.6	9090.2	6996.9	7023.2	72745.7	589.0	9.855	0.247	700.7	
10	MARA400	3	645.9	105.8	569.7	9659.9	1822.0	3653.1	76398.8	339.2	14.532	0.253	595.4	
11	ANDA20	1	6.5	687.9	37.3	9697.2	34.6	185.3	76535.1	19.1	20.279	0.257	512.1	
12	APUR765	1	760.7	50.0	317.5	18014.5	598.1	1967.8	78552.8	194.3	17.763	0.266	612.4	
13	TAM40	4	2071.5	74.5	1266.5	11301.0	4345.8	8324.8	86877.6	327.5	15.321	0.272	643.2	
14	HUAL90	9	149.5	642.8	301.4	12102.4	3987.3	5656.7	92534.2	548.9	13.352	0.272	684.9	
15	MARA440	3	423.6	176.0	629.4	12731.8	3930.5	4533.9	97058.1	439.1	12.071	0.273	696.1	
16	HUAL210	2	2125.0	61.8	1095.2	13827.0	2419.0	6804.6	103872.7	688.0	17.498	0.273	628.2	
17	SAMA10	1	30.0	1392.2	348.3	14175.5	1695.6	2735.8	106608.4	258.1	48.818	0.273	741.0	LOCUM10
18	TULU20	2	51.0	369.1	165.5	14340.0	230.7	1079.2	107687.6	111.1	19.168	0.282	671.3	
19	HUA8A40	3	440.0	96.5	354.1	14694.9	1552.4	2427.3	110114.9	245.6	14.499	0.283	696.4	
20	MAN270	2	307.5	111.3	245.5	14980.4	1011.5	1737.3	111852.1	190.1	16.228	0.293	665.8	
21	INA140	1	356.0	39.6	110.9	15091.3	83.5	687.1	112539.2	75.1	22.854	0.295	677.2	
22	SUA310	2	49.6	940.7	390.7	15482.0	583.3	2087.9	114627.1	241.0	21.166	0.296	616.8	
23	APUR660	5	315.5	158.8	417.8	15399.3	1151.4	2752.6	117379.6	297.2	17.861	0.297	711.3	
24	INA90	2	323.4	149.1	402.1	16501.9	1644.3	2703.2	120032.8	290.9	15.697	0.298	723.5	
25	HUAL190	2	1630.0	62.0	843.5	17145.4	5210.7	5993.3	126076.1	635.0	13.296	0.298	752.8	
26	HUAL120	2	208.5	201.0	349.5	17494.9	410.2	2166.0	126242.1	241.7	22.011	0.301	691.6	
27	ANDA30	1	6.5	875.3	47.5	17542.4	44.0	237.2	128479.2	28.6	23.861	0.302	602.1	
28	PISCU60	1	30.2	335.1	234.7	17777.1	1237.5	1845.5	130324.8	193.4	13.619	0.303	824.0	CHALO10
29	MARA300	2	269.0	113.1	253.7	18030.8	515.1	1574.5	131899.3	178.1	19.999	0.305	702.0	
30	MARA290	3	262.0	130.2	284.6	18315.4	1163.1	1914.7	133814.0	211.5	16.092	0.306	743.1	
31	TAM8050	2	31.5	544.1	142.9	18458.3	769.7	1136.7	134950.7	120.1	39.779	0.307	840.4	TAMBO10
32	APUR690	1	328.4	39.0	106.8	18565.1	61.0	662.0	135512.7	76.0	24.673	0.310	711.6	
33	MARA200	1	162.0	75.1	101.4	18666.5	265.4	663.9	136276.6	75.1	18.952	0.310	740.6	
34	CRIS10	3	31.8	755.0	200.2	18866.7	1549.1	1600.0	137876.6	171.7	12.794	0.312	857.6	AGRICULTURA
35	CHALO10	8	17.1	1061.4	151.4	19018.1	1325.3	1325.5	139201.8	139.5	12.345	0.313	921.4	AGRICULTURA
36	HUAL140	1	231.5	105.7	204.1	19222.2	507.2	1273.4	140475.2	147.9	19.491	0.314	724.6	
37	APUR717	1	335.1	94.3	263.6	19485.7	447.0	1634.1	142109.2	191.2	21.549	0.316	725.3	
38	MARA180	5	109.4	176.3	160.9	19646.6	349.4	1049.2	143158.4	120.8	20.270	0.316	750.8	URAB10
39	OTUCA10	1	9.6	754.4	60.4	19707.0	529.0	529.0	143687.4	56.6	24.195	0.318	937.1	
40	APUR734	1	522.7	52.0	226.7	19933.7	211.3	1404.9	145092.3	167.1	24.258	0.321	737.1	
41	MAN250	1	282.5	184.4	434.4	20360.1	1791.5	2639.6	147731.9	319.2	16.901	0.324	734.8	
42	LAMB10	1	17.2	346.7	49.8	20417.9	0.0	315.8	148047.6	37.9	28.166	0.326	761.0	
43	MO10	1	16.6	2140.5	296.3	20714.2	1239.8	1813.8	149861.4	221.3	17.004	0.328	746.9	
44	MAN230	2	162.0	147.3	199.0	20913.2	685.3	1172.1	151033.4	144.9	18.305	0.328	728.1	
45	APUR737	3	544.8	199.3	905.3	21818.5	4664.5	6442.0	157475.4	771.2	16.001	0.337	851.9	
46	MARA370	1	338.0	39.5	111.4	21929.9	114.4	590.3	158165.7	86.3	25.147	0.337	774.7	
47	MARA410	2	360.6	88.1	265.0	22194.9	732.1	1666.3	159831.9	207.2	20.270	0.337	781.9	
48	CASMA20	1	20.0	741.1	123.6	22318.5	686.5	814.6	160646.5	99.9	29.226	0.337	808.3	CASMA10
49	MARA250	2	244.7	61.6	125.6	22444.1	126.2	778.5	161425.0	97.3	25.241	0.337	774.7	
50	MARA320	3	281.8	144.1	358.7	22782.8	1026.6	2153.8	163578.7	267.1	19.702	0.337	788.6	
51	APUR741	1	566.7	23.7	112.0	22894.8	72.0	694.3	164273.0	87.5	26.777	0.340	781.2	
52	MAN320	2	358.5	88.3	263.9	23158.7	945.0	1603.0	165881.0	204.5	18.790	0.341	774.9	
53	MARA230	2	222.6	106.1	196.9	23355.6	581.0	1310.4	167191.4	162.6	20.168	0.342	825.8	
54	MAN260	3	286.0	132.2	315.2	23670.8	1113.5	1917.3	169108.6	245.2	18.981	0.343	777.9	
55	APUR240	6	221.0	65.0	119.8	23790.6	239.4	781.3	169889.9	98.2	22.580	0.345	819.7	
56	MAN290	1	337.9	150.1	423.1	24213.7	1943.4	2739.4	172629.2	346.7	17.367	0.346	819.4	
57	MARA350	4	294.7	136.2	334.7	24548.4	1472.0	2292.8	174922.0	293.6	18.297	0.356	877.2	
58	URUB90	3	149.8	319.3	398.9	24947.3	154.7	2455.8	177377.7	328.9	29.560	0.360	824.5	
59	PALCA15	2	22.4	555.5	122.5	25069.8	207.7	798.6	178176.3	105.6	24.610	0.362	862.0	
60	ALMAD10	2	249.0	131.9	273.9	25343.7	1787.7	2010.3	180186.6	259.8	16.049	0.367	948.5	
61	MARA210	1	211.0	97.2	171.0	25514.7	645.1	1186.3	181372.8	156.3	20.018	0.368	914.0	
62	MAJFS20	1	35.0	981.0	286.4	25801.1	939.0	1818.4	183191.2	247.4	29.482	0.370	863.8	APU10
63	PALCA30	1	23.1	286.4	55.2	25856.3	19.5	338.2	183529.4	47.4	31.066	0.376	858.7	
64	PFR20	3	259.7	31.0	67.1	25923.4	89.8	416.1	183945.4	58.6	27.157	0.380	873.3	
65	MAN340	5	376.4	114.6	359.8	26263.2	1022.7	2046.5	185991.9	297.1	22.708	0.381	825.7	
66	MAY150	2	143.6	129.6	160.7	26443.9	593.5	954.4	186946.3	137.5	20.833	0.383	855.6	
67	MAJFS10	1	34.0	745.6	211.4	26655.3	727.5	1353.4	188299.7	190.6	32.301	0.384	901.6	APU10
68	INA80	1	160.0	119.1	165.9	26821.2	553.5	1071.3	189370.9	151.9	21.939	0.387	915.6	
69	PACHA70	2	129.1	500.3	358.7	27359.9	1345.4	3361.5	192732.4	484.2	24.135	0.389	898.8	
70	TAM60	2	2172.5	32.0	579.8	27939.7	1948.0	3748.5	196480.9	534.3	22.002	0.390	921.5	
71	PA1110	1	18.9	679.9	107.3	28047.0	264.1	657.3	197138.2	96.5	24.559	0.394	899.3	
72	HUAL130	2	224.0	102.3	191.2	28238.2	307.9	1185.0	198323.2	173.5	27.263	0.395	907.4	
73	PA4240	7	175.4	908.7	1329.3	29567.5	8503.7	9640.8	207963.9	1348.0	17.429	0.396	1014.1	
74	MAN210	5	156.1	89.9	117.1	29684.6	398.4	689.3	208653.2	104.0	22.441	0.400	888.1	
75	APUR670	1	323.0	155.7	419.3	30103.9	1088.6	2620.7	211273.9	389.0	24.600	0.401	927.7	
76	APUR720	2	482.8	152.0	612.0	30715.9	1404.2	3807.7	215081.6	567.5	25.542	0.402	927.3	
77	MAN310	1	353.9	110.0	324.6	31040.5	689.7	1654.2	216735.7	265.8	26.602	0.405	818.9	
78	FULA30	1	32.0	452.7	120.8	31161.3	779.6	872.7	217608.4	125.7	20.511	0.407	1040.6	FULA10
79	URUB190	4	178.0	324.4	481.6	31642.9	2478.6	3421.2	221029.6	496.7	19.752	0.408	1031.4	
80	HUAL150	3	236.0	26.7	52.5	31695.4	27.9	325.2	221354.8	49.3	32.747	0.409	939.0	
81	TAMBO70	2	50.7	809.4	342.2	32037.6	1253.7							

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA ASCENDENTE POR : FFC1 CON 0.00 MW \$ PI \$= 5000.00 MW

RANK	PROYECTO	ALT. (M)	QM (M ³ /S)	HN (M)	PI (MW)	PACU (MW)	FP (GWH)	FT (GWH)	FACU (GWH)	INV (10*6 \$)	FFC (\$/MWH)	FFC1 (-)	KFSP (\$/KW)	PROYECTOS CONDICIONANTES
111	SANTA110	11	86.9	278.8	202.1	38841.9	410.8	1268.6	269249.1	233.4	32.601	0.498	1154.9	
112	SGAB30	3	62.0	914.4	472.8	39314.7	1248.2	2958.0	272207.1	547.8	30.552	0.501	1158.6	
113	PER10	2	250.0	101.8	212.2	39256.9	1002.2	1480.8	275687.8	267.9	25.307	0.506	1262.5	
114	VNOTA200	1	109.0	53.5	48.6	39575.5	120.3	291.8	273979.6	55.4	31.565	0.507	1139.9	
115	CHIR10	1	26.0	264.1	57.3	39632.8	125.6	456.0	274435.5	80.8	32.597	0.515	1410.1	
116	MARA120	2	93.6	104.4	81.5	39714.3	206.5	443.4	274878.9	88.5	31.925	0.515	1085.9	
117	TACNA30	1	4.3	976.3	35.0	39749.3	129.9	240.0	275118.9	44.7	28.376	0.519	1277.1	
118	FULA10	1	38.0	1044.2	330.9	40080.2	2501.3	2501.3	277620.1	456.1	21.990	0.522	1378.4	AGUA POTABLE
119	TULU10	1	41.1	453.6	155.5	40235.7	303.1	832.0	278452.1	171.1	35.351	0.528	1100.3	
120	PISCO40	1	16.9	361.4	50.9	40286.6	0.0	229.6	278681.7	50.7	51.820	0.532	996.1	
121	PISCO20	1	9.1	756.9	57.4	40344.0	26.5	254.6	278936.2	56.8	47.399	0.533	989.5	
122	CANET60	1	31.8	427.2	113.4	40457.4	139.6	563.0	279499.2	122.7	40.964	0.544	1082.0	
123	HUA10	1	10.2	898.2	76.7	40534.1	193.4	524.9	280024.1	102.9	33.604	0.545	1341.6	
124	POZ30	15	155.1	301.6	390.1	40924.2	2188.8	2762.4	282786.4	545.4	25.843	0.555	1398.1	
125	CHIN20	1	77.2	73.4	47.3	40971.5	352.3	384.8	283171.2	73.3	23.323	0.556	1549.7	
126	FULA20	1	32.0	854.3	228.0	41199.5	1471.3	1647.0	284818.2	325.2	22.571	0.558	1426.3	FULA10
127	CHANC10	1	9.2	1093.4	84.3	41283.8	141.2	536.5	285354.7	110.8	38.372	0.562	1314.4	
128	MANTA10	4	9.8	954.6	77.9	41361.7	79.0	423.6	285778.2	92.4	43.140	0.563	1186.1	
129	TOTR10	1	14.8	179.9	22.2	41383.9	18.5	127.4	285905.6	27.5	44.251	0.568	1238.7	
130	OLMOS20	1	32.4	269.8	73.0	41456.9	173.3	501.7	286407.3	103.9	36.104	0.577	1423.3	
131	TAMBO60	4	31.5	449.7	118.1	41575.0	692.6	939.4	287346.7	189.2	54.041	0.585	1602.0	TAMBO10
132	CORALL10	1	13.0	1424.4	154.4	41729.4	546.8	813.5	288160.2	189.8	32.212	0.586	1229.3	
133	APUR250	5	226.7	162.0	306.4	42035.8	596.4	1998.0	290198.2	429.7	39.463	0.589	1402.4	
134	VNOTA140	1	104.0	108.4	94.0	42129.8	654.2	706.7	290864.9	147.1	25.355	0.595	1564.9	
135	MAN140	4	123.0	110.0	112.8	42242.6	703.5	794.5	291659.4	168.8	26.440	0.596	1496.5	
136	MAN60	2	56.1	64.0	29.9	42272.5	87.6	184.9	291844.2	41.3	35.531	0.601	1381.3	
137	CHAN25	2	32.0	522.7	139.5	42412.0	722.0	944.2	292788.4	207.0	29.143	0.608	1483.9	
138	CHAN29	1	52.0	377.7	163.8	42575.8	57.8	1003.9	293792.3	229.1	50.625	0.613	1398.7	
139	CHIL130	1	12.9	645.3	69.5	42645.3	179.7	348.5	294140.8	90.0	38.330	0.621	1295.0	
140	MARCA70	2	64.0	179.9	96.0	42741.3	46.1	595.0	294735.7	138.5	50.690	0.628	1442.7	
141	TACNA50	1	4.3	321.5	11.5	42752.8	42.8	79.1	294814.8	17.8	34.349	0.628	1547.8	
142	PISCO80	2	47.1	359.7	141.2	42894.0	535.6	945.2	295760.0	216.8	20.233	0.634	1535.4	CHAL010
143	UTC50	2	59.0	440.3	216.7	43110.7	1239.8	1531.6	297291.6	348.8	29.525	0.640	1609.6	
144	TACNA40	1	4.3	357.6	12.8	43123.5	47.6	88.0	297379.6	20.3	35.133	0.642	1585.9	
145	STOM120	4	83.0	257.2	178.0	43301.5	302.0	1160.8	298540.3	273.0	43.784	0.645	1533.7	
146	MAN130	2	74.5	88.0	54.7	43356.2	199.8	324.3	298864.6	78.9	35.333	0.647	1442.4	
147	APUR25	1	57.3	56.7	27.1	43383.3	133.5	161.3	299023.8	39.2	31.211	0.647	1446.5	
148	TAB10	1	75.0	86.9	54.3	43437.6	248.5	424.8	299450.6	95.4	35.221	0.649	1756.9	
149	SANTA90	5	73.5	86.2	52.8	43490.4	145.8	331.5	299782.1	97.7	39.124	0.650	1850.4	
150	RAPAY20	1	17.8	701.5	104.3	43594.7	174.8	664.1	300446.1	159.0	44.463	0.651	1524.4	
151	CANET130	1	57.6	269.8	129.6	43724.3	159.6	643.5	301089.6	169.5	49.508	0.658	1307.9	
152	CHON10	1	24.1	220.6	44.3	43768.6	232.3	295.5	301385.1	72.4	32.190	0.676	1634.3	
153	OYO20	1	7.9	972.5	64.2	43832.8	0.0	164.3	301549.3	61.0	87.043	0.678	950.2	
154	JEFE10	1	123.0	53.3	54.7	43887.5	89.7	339.1	301888.4	85.4	46.724	0.679	1561.2	
155	APURI48	2	88.2	293.0	215.5	44103.0	737.6	1230.5	303118.9	319.3	38.060	0.681	1481.7	
156	COTAH20	4	30.3	359.7	90.8	44193.8	0.0	316.7	303435.6	105.1	77.874	0.682	1157.5	
157	VILCA170	8	69.4	505.9	293.0	44486.8	1037.8	1683.6	305119.1	439.9	37.926	0.687	1501.4	
158	INA30	8	63.3	495.9	261.8	44748.6	1577.8	1851.8	306970.9	455.0	31.125	0.690	1738.0	
159	SANJU20	1	20.0	533.9	89.1	44837.7	118.7	395.8	307366.6	114.2	52.054	0.691	1281.7	
160	SANTA120	13	100.9	409.4	344.5	45182.2	1391.5	2198.7	309565.3	579.2	36.811	0.697	1681.3	
161	TACNA20	1	4.3	482.9	17.3	45199.5	64.2	118.7	309684.0	29.8	38.199	0.698	1722.5	
162	CHANC20	1	15.7	719.4	94.0	45293.5	157.4	598.2	310282.2	153.8	47.755	0.699	1636.2	
163	PAMI80	11	146.2	371.2	452.6	45746.1	2910.2	3698.0	313980.2	885.0	31.418	0.700	1925.4	
164	JEQUE10	2	8.5	674.5	47.8	45793.8	177.7	277.9	314238.1	73.8	37.981	0.701	1543.9	
165	LAMB30	1	34.2	394.7	112.6	45906.4	215.7	643.1	314901.1	171.9	46.943	0.701	1526.6	
166	SAMA30	1	30.0	314.8	78.8	45989.2	51.5	361.5	315262.6	104.6	59.424	0.702	1327.4	
167	CULCA70	1	52.9	269.8	119.1	46104.3	35.7	642.5	315905.1	179.6	62.141	0.720	1508.0	
168	TULU70	1	116.0	205.3	198.6	46302.9	497.2	1239.8	317144.9	331.0	44.711	0.722	1666.7	
169	SANTA60	3	52.0	214.8	93.2	46396.1	470.5	646.4	317791.2	194.7	35.399	0.728	2089.1	
170	PAT120	1	22.5	735.3	138.0	46534.1	717.7	941.2	318732.4	246.7	34.887	0.728	1787.7	
171	PUNA10	4	13.4	932.8	104.4	46638.5	777.4	797.3	319529.7	202.9	30.222	0.730	1943.5	
172	SAMA20	1	30.0	314.8	78.8	46717.3	51.5	361.5	319891.2	109.0	61.907	0.731	1383.2	
173	MAN70	2	58.8	44.3	21.7	46739.0	85.0	134.1	320025.2	37.0	39.578	0.742	1705.1	
174	CHAL50	9	35.4	503.9	148.8	46887.8	524.6	854.2	320879.4	242.9	41.325	0.748	1632.4	
175	OXA20	9	11.5	1164.4	111.7	46999.5	358.3	753.0	321632.4	204.8	43.227	0.753	1833.5	
176	LAMB20	1	30.2	269.3	67.9	47067.4	291.2	426.4	322058.8	119.2	38.982	0.757	1755.5	
177	SANJU10	1	14.3	530.6	63.3	47130.7	74.3	280.9	322339.7	89.0	58.740	0.758	1406.0	
178	LOCUM20	1	4.6	372.1	14.3	47145.0	122.5	125.0	322464.7	32.0	30.357	0.762	2237.8	
179	ARMA20	1	9.4	1164.0	90.8	47235.8	0.0	232.1	322696.7	97.4	98.425	0.767	1072.7	
180	MAN90	4	134.6	130.9	146.9	47382.7	763.6	973.3	323670.0	271.6	36.688	0.769	1848.9	
181	APURI00	3	70.9	260.8	154.3	47537.0	373.2	780.7	324450.7	241.8	49.163	0.779	1567.1	
182	ANTA60A	4	82.6	251.8	173.4	47710.4	345.0	928.0	323378.7	282.0	51.976	0.780	1626.3	
183	STOM170	2	95.7	171.8	137.2	47847.6	158.3	732.8	326111.4	223.0	58.707	0.781	1625.4	
184	MAN80	3	92.5	87.8	67.7	47915.3	245.9	413.4	326524.8	120.8	42.982	0.784	1784.3	
185	PISCO30	1	12.0	539.6	54.0	47969.3	24.9	239.3	326764.1	79.3	70.469	0.793	1468.5	
186	CULCA50	2	37.0	539.6	166.5	48135.8	49.9	898.2	327662.2	276.8	68.496	0.793	1662.5	
187	URAB10	3	9.6	1228.8	98.4	48234.2	861.6	861.6	328923.8	230.3	31.350	0.795	2340.4	
188	CHAN30	4	77.1	150.6	96.8	48331.0	441.2	669.2	329193.0	191.5	40.459	0.798	1978.3	
189	MALA20	1	16.0	539.6	72.0	48403.0	33.2	319.1	329512.1	106.7	71.075	0.800	1481.9	
190	JEQUE20	4	8.5	360.8	25.6	48428.6	97.1	155.0	329667.1	46.4	39.823	0.801	1812.5	JEQUE10
191	TABLA10	1	27.5	421.1	96.6	48525.2	340.7	576.3	330243.3	182.2	44.497	0.804	1886.1	

LISTADO DE LOS PROYECTOS HIDROELECTRICOS
 ORDENADO EN FORMA ASCENDENTE POR : FFC1 CON

0.00 MW \$ PI \$= 5000.00 MW

RANK	PROYECTO	ALT.	QM (M**3/S)	HN (M)	PI (MM)	PACU (MM)	FP (GWH)	FT (GWH)	FACU (GWH)	INV (10**6 \$)	FFC \$(/MWH)	FFC1 (-)	KFSP (\$/KW)	PROYECTOS CONDICIONANTES
221	CASMA10	2	20.0	672.4	112.2	51730.4	574.3	745.0	349919.7	269.8	44.712	0.930	2404.6	
222	HUAL50	1	23.4	542.1	105.8	51836.1	431.8	627.1	350547.5	220.2	48.751	0.933	2081.3	
223	MALJ10	1	16.0	584.5	78.0	51914.1	35.9	345.6	350893.1	142.1	82.990	0.934	1821.8	
224	SANJU30	1	20.0	359.7	60.0	51974.1	27.6	265.8	351158.8	104.6	83.589	0.941	1743.3	
225	COLCA10	1	11.2	171.0	16.0	51990.1	89.1	105.4	351264.2	36.1	43.584	0.943	2256.3	AGRICULTURA
226	UTC70	1	88.5	135.8	100.2	52090.3	576.4	708.7	351972.9	239.2	43.672	0.948	2387.2	
227	MOCHE20	3	5.8	582.8	28.3	52118.6	7.8	125.7	352098.6	50.0	87.871	0.951	1766.8	
228	APUR90	1	69.6	73.7	42.7	52161.3	94.1	213.9	352312.4	81.8	62.287	0.958	1915.7	
229	PACHA30	8	104.9	407.2	356.2	52517.5	1584.1	2597.2	354909.6	878.5	49.288	0.958	2466.3	
230	COLCA60	8	46.4	89.9	34.8	52552.3	10.4	187.8	355097.4	70.5	83.439	0.966	2025.9	
231	CHAMA30	2	51.6	129.4	55.7	52608.0	150.9	361.8	355459.1	128.3	58.708	0.971	2303.4	
232	VELL37	8	20.7	605.0	104.6	52712.6	425.2	586.4	356045.5	221.0	51.257	0.983	2112.8	
233	PISCO90	1	16.9	539.6	76.1	52788.7	0.0	342.8	356388.2	140.5	96.131	0.987	1846.3	
234	YANA10	3	32.0	274.9	73.4	52862.1	138.4	478.5	356866.7	172.5	65.599	0.988	2350.1	
235	CANET40	3	20.3	481.9	81.7	52943.8	174.9	410.5	357277.2	167.9	65.775	1.003	2055.1	
236	PAMI25	8	89.8	257.5	192.8	53136.6	1636.2	1653.9	358931.1	562.7	40.126	1.007	2918.6	
237	PARA20	1	7.2	765.8	46.3	53182.9	0.0	133.7	359064.8	71.0	124.603	1.012	1533.5	
238	POZZ20	7	48.6	237.4	96.2	53279.1	675.1	733.8	359798.6	261.6	43.557	1.023	2719.3	
239	COLCA80	3	60.8	224.8	114.0	53393.1	105.6	569.5	360368.0	238.4	82.848	1.048	2091.2	
240	QUIR010	2	13.0	151.7	16.4	53409.5	69.4	100.9	360468.9	39.6	54.599	1.056	2414.6	
241	TAMBO100	1	54.3	179.9	81.5	53491.0	281.9	557.9	361026.7	212.6	89.068	1.060	2608.6	TAMBO10
242	PAMI01	1	44.8	64.7	24.2	53515.2	89.5	140.0	361166.7	56.3	57.548	1.061	2326.4	
243	SANTA80	5	62.7	215.8	112.9	53628.1	229.5	708.7	361875.4	278.1	69.541	1.063	2463.2	
244	SANJU40	1	20.0	354.1	59.1	53687.2	49.5	267.1	362142.5	118.4	87.752	1.069	2003.4	
245	SGAB60	4	75.0	109.3	68.3	53755.5	198.8	432.5	362575.0	175.5	65.211	1.102	2569.5	
246	OYO10	2	5.7	1879.0	89.3	53844.8	247.5	337.1	362912.1	175.8	70.540	1.102	1968.6	
247	ANTA27	2	33.9	379.5	107.3	53952.1	279.2	585.6	363497.6	254.4	69.014	1.123	2370.9	
248	OCONA80	1	89.7	127.9	95.7	54047.8	164.0	442.8	363940.4	208.2	80.481	1.144	2175.5	
249	MARA50	3	32.4	346.2	93.4	54141.2	352.1	514.8	364455.1	227.9	61.667	1.148	2440.0	
250	CHAN10	5	13.0	648.9	70.4	54211.6	341.9	438.7	364893.8	186.9	56.158	1.151	2654.8	
251	JEUQUE30	1	8.5	359.7	25.5	54237.1	100.3	159.5	365053.3	68.1	46.514	1.155	2670.6	JFQUE10
252	ICHU20	1	13.2	352.4	38.8	54275.9	122.5	207.0	365260.3	94.0	66.918	1.164	2422.7	
253	SANTA40	10	18.3	524.0	80.1	54356.0	576.2	623.1	365883.4	277.3	50.113	1.186	3461.9	
254	UCONA70	2	89.7	217.8	163.0	54519.0	723.2	984.6	366867.9	437.6	60.117	1.189	2684.7	
255	VNOTA90	2	94.4	165.5	130.3	54649.3	538.1	776.5	367644.4	347.9	62.090	1.193	2670.0	
256	APUR45	3	66.2	199.5	110.1	54759.4	529.1	646.4	368290.8	291.1	58.095	1.193	2644.0	
257	VIL20	1	37.2	94.0	29.2	54788.6	76.1	163.7	368454.5	75.2	73.558	1.199	2575.3	
258	PAMB4	1	36.6	59.4	18.1	54806.7	66.7	104.9	368559.4	48.3	66.035	1.214	2668.5	
259	OCONA15	1	20.0	772.3	128.8	54935.5	464.5	641.1	369200.4	312.3	66.254	1.218	2424.7	
260	MARA80	4	76.3	249.6	158.8	55094.3	787.8	995.5	370195.9	448.7	59.030	1.220	2825.6	
261	TAMBO110	1	56.5	107.5	50.6	55144.9	268.6	378.7	370574.6	167.9	94.144	1.235	3318.2	TAMBO10
262	APUR810	2	818.3	61.5	420.1	55565.0	957.2	2612.7	373187.3	1208.8	79.436	1.250	2877.4	
263	CHILL30	1	8.4	179.9	12.7	55577.7	21.2	80.6	373267.9	37.0	85.322	1.259	2913.4	
264	URUM15	10	21.2	563.4	99.6	55677.3	544.8	695.1	373962.9	312.3	59.082	1.257	3135.5	
265	CHAL10	1	20.2	294.8	49.8	55727.1	193.2	275.9	374238.8	135.3	67.664	1.275	2716.9	
266	TAMBO20	1	24.2	302.6	61.1	55788.2	529.8	533.5	374772.3	235.0	79.019	1.291	3846.2	TAMBO10
267	OCONA35	3	37.0	500.4	154.4	55942.6	395.0	769.9	375542.2	397.6	80.080	1.292	2575.1	
268	COTAH25	6	33.0	585.0	161.0	56103.6	715.0	972.7	376514.9	475.7	65.854	1.303	2942.2	
269	PAUC270	2	61.0	157.4	80.1	56183.7	648.5	656.1	377170.9	297.4	53.476	1.326	3712.9	
270	CASMA60	1	24.3	80.9	16.4	56200.1	82.4	113.6	377284.5	54.6	47.377	1.341	3329.3	CASMA10
271	UTC30	1	50.0	131.1	54.7	56254.8	336.2	387.4	378671.9	186.3	60.410	1.352	3405.9	
272	VNOTA60	2	91.1	97.6	74.1	56328.9	489.0	538.4	378210.2	258.8	59.101	1.361	3492.6	
273	SANTA10	1	7.2	238.1	14.4	56343.3	118.6	120.5	378330.7	85.8	55.031	1.370	5958.3	
274	RIMAC10	1	5.1	1253.1	53.3	56396.6	338.9	421.3	378752.0	199.6	61.599	1.373	3744.3	
275	CHIL120	1	8.3	223.8	15.5	56412.1	83.5	97.6	378849.6	122.3	64.120	1.375	7890.3	
276	CHAMA40	7	51.6	89.9	38.7	56450.8	37.9	251.1	379100.6	127.4	103.409	1.388	3292.0	
277	SANTA70	3	52.0	170.9	74.1	56524.9	136.0	456.7	379557.3	236.6	93.647	1.395	3193.0	
278	VILCA120	6	46.1	367.7	141.4	56666.3	663.5	874.5	380431.8	453.4	69.154	1.397	3206.5	
279	VIL10	9	21.6	275.6	49.6	56715.9	244.9	330.0	380761.8	167.3	68.278	1.398	3373.0	
280	OCONA60	1	86.5	197.3	142.4	56858.2	450.5	762.9	381524.7	415.3	80.308	1.398	2916.4	
281	PUCH10	1	15.4	223.7	28.7	56886.9	64.5	154.3	381678.9	85.0	91.111	1.416	2961.7	
282	PUCH20	9	28.8	440.9	105.9	56992.8	363.2	604.9	382283.8	335.2	80.745	1.446	3146.4	
283	QUIR020	2	20.4	257.6	43.8	57036.6	198.3	276.9	382560.7	148.4	73.293	1.455	3388.1	
284	CHON20	1	30.6	214.8	54.8	57091.4	255.0	363.7	382924.4	193.4	73.337	1.465	3529.2	
285	CHOTA10	1	17.2	108.0	15.5	57106.9	76.6	108.3	383032.6	57.1	72.457	1.476	3683.9	
286	COTAH10	3	21.5	562.2	100.8	57207.7	309.3	459.0	383491.6	291.2	88.899	1.533	2888.9	
287	OXA30	7	16.1	264.5	35.5	57243.2	172.8	249.6	383741.2	141.9	78.817	1.594	3997.2	
288	JEUQUE50	3	32.5	196.3	53.2	57296.4	247.4	314.9	384056.1	189.2	60.598	1.596	3556.4	JFQUE10
289	CHICA30	2	51.9	67.3	29.1	57325.5	110.6	168.7	384224.7	102.8	18.784	1.607	3532.6	CRIS10
290	JEUQUE60	1	33.0	144.9	39.9	57365.4	139.7	209.3	384434.0	133.7	60.493	1.629	3350.9	JFQUE10
291	ICA10	1	23.6	179.9	35.4	57400.8	227.2	254.9	384688.9	148.7	21.584	1.646	4200.6	CHAL010
292	STOM30	1	25.7	300.2	64.4	57465.2	223.0	368.3	385057.1	238.0	94.427	1.698	3695.7	
293	SANTA20	1	13.1	303.7	33.3	57498.5	137.4	223.8	385280.9	161.0	92.133	1.753	4834.8	
294	TAMBO80	2	54.3	179.9	81.5	57580.0	281.9	557.9	385838.7	356.0	114.596	1.775	4568.1	TAMBO10
295	VILCA70	1	26.4	344.2	75.9	57655.9	155.2	406.3	386245.0	283.6	118.482	1.792	3736.5	
296	SANJU50	1	20.0	171.5	28.6	57684.5	73.2	148.1	386393.1	104.7	111.008	1.793	3660.8	
297	VIZCA10	2	15.6	248.0	32.4	57716.9	91.6	168.3	386561.3	121.4	109.619	1.833	3746.9	
298	BLANC10	1	3.9	390.1	12.7	57729.6	71.6	81.7	386645.0	89.5	84.615	1.847	7047.2	
299	LOCUM10	1	32.5	1359.9	367.5	58097.1	3218.7	3218.7	389381.7	1357.6	73.018	1.853	3694.1	
300	HUAN10	2	19.1	343.1	54.8	58151.9	405.7	446.4	390308.1	284.4	78.307	1.861	5189.8	
301	SOND020	8	6.8	458.7	26.0	58177.9	109.2</							