

## References list (partial)

Ref	Country	Year	Type	Hn	Qn	Nb of units	Ø	Power / Unit	Total Power	HPP contribution
13	France	1987	Kaplan	4,8	35	2	2720	1400 kW	2800 kW	Design
15	Italy	1997	Francis	6,3	2	3	800	100 kW	300 kW	Refurbishment
16	Italy	1988	Francis	11	4,3	2	1000	400 kW	800 kW	Turnkey
109	France	1986	Kaplan	4,75	7,8	1	1450	290 kW	290 kW	Refurbishment
123	India	1991	Kaplan	2,7	25	2	2720	550 kW	1100 kW	Turnkey
133	Ireland	1990	Francis	12,5	2,5	1	830	260 kW	260 kW	Turnkey
133	Ireland	1990	Francis	12,5	3,5	1	940	360 kW	360 kW	Turnkey
152	Portugal	1992	Francis	99,5	6	2	833	5100 kW	10200 kW	Detailed studies
158	Portugal	1994	Kaplan	6,7	6,2	1	1200	340 kW	340 kW	Turnkey
185	Portugal	1994	Pelton	210	0,5	1	960	830 kW	830 kW	Refurbishment
185	Portugal	1994	Pelton	210	1	1	770	1660 kW	1660 kW	Refurbishment
187	Portugal	1993	Pelton	285	1,02	1	670	2400 kW	2400 kW	Turnkey
192	Canada	1988	Francis	17	55	1	3400	8000 kW	8000 kW	Design
202	France	1991	Francis	9	1,9	1	800	140 kW	140 kW	Turnkey
227	Portugal	1994	Pelton	210,0	0,3	1	650	600 kW	600 kW	Turnkey
227	Portugal	1994	Pelton	210	0,6	1	650	1200 kW	1200 kW	Turnkey
236	France	1992	Kaplan	4,25	27,5	1	1450	965 kW	965 kW	Refurbishment
245	France	1995	Pelton	285	0,4	3	900	900 kW	2700 kW	Refurbishment
245	France	1995	Pelton	400,0	0,45	1	900	1500 kW	1500 kW	Refurbishment
257	France	1992	Kaplan	4,7	45	2	2380	1400 kW	2800 kW	Design
258	France	1996	Kaplan	1,8	12	2	2000	170 kW	340 kW	Turnkey
259	France	1999	Kaplan	2,5	100	7		285 kW	2000 kW	Refurbishment
264	France	1994	Kaplan	2,3	23	1	2500	425 kW	425 kW	Turnkey
265	France	1994	Pelton	400	0,6	1	1075	2000 kW	2000 kW	Design + Runner
283	Spain	1993	Pelton	270	1	1	870	2350 kW	2350 kW	Design
298	Guinea	1996	Francis	48	14	2	1000	5500 kW	11000 kW	Design
325-1	India	1997	Kaplan	6,3	23	2	2300	1200 kW	2400 kW	Turnkey
325-2	India	1997	Kaplan	4,65	23	2	2300	874 kW	1748 kW	Turnkey
325-3	India	1997	Kaplan	7,3	23	2	2300	1380 kW	2760 kW	Turnkey
338	India	2001	Kaplan	6,1	21	4	2300	1100 kW	4400 kW	Turnkey
383	India	2001	Kaplan	9,0	11	1	1700	900 kW	900 kW	Turnkey
383	India	2001	Kaplan	10,0	12	1	1700	1000 kW	1000 kW	Turnkey
358	India	2000	Kaplan	7,5	13	2	1700	830 kW	1660 kW	Turnkey
360	India	2000	Kaplan	6,3	23	4	2300	1100 kW	4400 kW	Turnkey
363	India	1998	Kaplan	12	14	1	2000	1400 kW	1400 kW	Turnkey
364	India	1999	Kaplan	3,6	20	1	2300	560 kW	560 kW	Turnkey
365	India	2001	Kaplan	5,6	17	1	2000	800 kW	800 kW	Turnkey
371	France	1996	Francis	30	5,5	1	962	1350 kW	1350 kW	Design + Runner
385	India	2002	Kaplan	6,5	20	1	2000	1100 kW	1100 kW	Turnkey
386	India	2002	Kaplan	7	38,5	2	2900	2250 kW	4500 kW	Turnkey
391	France	2004	Pelton	44	0,25	1	430	90 kW	90 kW	Turnkey
452	France	2004	Pelton	380	0,36	1	760	1140 kW	1140 kW	Design + Runner
500	Sri Lanka	2003	Francis	87	2,35	1	650	1750 kW	1750 kW	Turnkey
505	Sri Lanka	2002	Pelton	95	1,4	1	780	1080 kW	1080 kW	Turnkey
508	Belgium	2001	Kaplan	1,6	22,5	2	2900	300 kW	600 kW	Design
522	France	2002	Kaplan	3,2	10	3	1700	250 kW	750 kW	Turnkey
545	Sri Lanka	2005	Pelton	200	1,1	1	750	1950 kW	1950 kW	Turnkey
551	Tahiti	2003	Francis	163	1,2	1	460	1620 kW	1620 kW	Refurbishment
564	India	2010	Francis	54,5	6	2	960	2681 kW	5362 kW	Turnkey

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583	India	2009	Francis	109	3,85	2	780	3450 kW	6900 kW	Turnkey
586	India	2010	Francis	52,0	7,75	2	1080	3340 kW	6680 kW	Turnkey
588	Sri Lanka	2006	Francis	22,8	9	1	1380	1800 kW	1800 kW	Turnkey
588	Sri Lanka	2006	Francis	22,8	4,5	1	962	900 kW	900 kW	Turnkey
599	India	2010	Francis	195	3,55	4	800	5750 kW	23000 kW	Turnkey
600	France	2008	Kaplan	4,25	5	1	1200	180 kW	180 kW	Turnkey
601	India	2008	Francis	35,0	8,62	2	1180	2500 kW	5000 kW	Turnkey
621	India	2010	Kaplan	11,0	43,7	3	2900	4000 kW	12000 kW	Turnkey
634	India	2011	Kaplan	2,5	39,9	1	3600	831 kW	831 kW	Turnkey
659	Kenya/Uganda	2007	Pelton	240	3	4	1025	6000 kW	24000 kW	Detailed studies
671	India	2011	Pelton	190	1,65	1	1096	2728 kW	2728 kW	Turnkey
704	India	2012	Kaplan	12	54	3	3100	5650 kW	16950 kW	Turnkey
737	India	2010	Pelton	215	1,04	1	971	1950 kW	1950 kW	Turnkey
792	Madagascar	2010	Francis	31	10	2	1380	3000 kW	6000 kW	Turnkey
799	India	2010	Kaplan	2,9	42,5	2	3600	1020 kW	2040 kW	Turnkey
842	India	2012	Kaplan	7,1	14,5	1	1800	863 kW	863 kW	Turnkey
346	India	2012	Kaplan	4,3	11,55	2	1800	410 kW	820 kW	Turnkey
815-1	Romania	2014	Francis	53,6	0,8	1	400	315 kW	315 kW	Turnkey
815-2	Romania	2011	Pelton	90	0,35	1	500	256 kW	256 kW	Turnkey
815-3	Romania	2014	Francis	62	1,1	1	450	565 kW	565 kW	Turnkey
815-4	Romania	2014	Francis	35,3	0,85	1	450	250 kW	250 kW	Turnkey
815-5	Romania	2011	Pelton	64,6	0,23	1	425	122 kW	122 kW	Turnkey
815-6	Romania	2014	Francis	63,3	1,05	1	450	565 kW	565 kW	Turnkey
836	India	On going	Francis	134	2,61	2	750	2500 kW	5000 kW	Turnkey
847	DRC	2012	Francis	18	5,5	1	1000	820 kW	820 kW	Turnkey
862	India	On going	Kaplan	6	62	3	3600	3000 kW	9000 kW	Turnkey
875	Nigeria	On going	Francis	14,5	5	2	1100	600 kW	1200 kW	Turnkey
877	India	2013	Kaplan	7,0	60	2	3600	3000 kW	6000 kW	Turnkey
878	India	2013	Kaplan	4,8	60	2	3600	2000 kW	4000 kW	Turnkey
886	Turkey	2013	Francis	46,76	6,4	2	960	2300 kW	4600 kW	Turnkey
917	Turkey	2014	Pelton	220	0,4	1	590	726 kW	726 kW	Turnkey
926-1	Romania	2014	Pelton	118,6	0,42	1	570	418 kW	418 kW	Turnkey
926-2	Romania	2014	Pelton	68,3	0,6	1	648	344 kW	344 kW	Turnkey
926-3	Romania	2014	Pelton	130,5	0,6	1	590	657 kW	657 kW	Turnkey
931	Romania	2013	Francis	53	1,8	1	510	926 kW	926 kW	Refurbishment
946	France	2012	Pelton	68	0,65	1	655	385 kW	385 kW	Turbine
960	France	2012	Pelton	194	0,45	1	735	730 kW	730 kW	Turbine
974-1	Romania	2012	Pelton	111,15	0,98	1	700	928 kW	928 kW	Turnkey
974-2	Romania	2012	Pelton	87,65	0,98	1	745	729 kW	729 kW	Turnkey
889	DRC	2014	Double Francis	58	4x11	4	960	5400 kW	21600 kW	Turnkey
962-1	DRC	On going	Francis	28,16	11	2	1380	2650 kW	5300 kW	Turnkey
962-2	DRC	2017	Kaplan	13,7	45	2	3100	5320 kW	10640 kW	Turnkey
962-3	DRC	On going	Kaplan	11,03	53	2	3100	5050 kW	10100 kW	Turnkey
1041	France	2013	Kaplan	8	20	1	2060	1200 kW	1200 kW	Refurbishment
1048	France	2013	Francis	20	1,5	1	600	250 kW	250 kW	Refurbishment

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1063	Ecuador	2013	Pelton	190,7	1,495	1	1200	2390 kW	2390 kW	Refurbishment
982	South Africa	2015	Kaplan	15,34	30	3	2500	4010 kW	12030 kW	Turnkey
1027	Ireland	2013	Francis	15	2,5+3,5	2	830+940	250+350kW	600 kW	Refurbishment
1054	France	2015	Kaplan	9	12	1	1600	850 kW	850 kW	Turnkey
1095	France	2015	Kaplan	13,7	4	1	940	>425kW	>425kW	Turnkey
1111	India	On going	Pelton	280	0,104	2	450	200 kW	400 kW	Turnkey
1137	India	On going	Francis	50	1,5	2	510	500 kW	1000 kW	Turnkey
1056	France	2014	Kaplan	11,5	20	2	2360	2752 kW	5504 kW	Refurbishment
1173	India	On going	Francis	34	2,7	2	700	750 kW	1500 kW	Turnkey
1162	Middle East	2015	Francis	54	0,3	1	300	130 kW	130 kW	Turnkey
1185	Middle East	2016	Francis	40	0,55	1	350	180 kW	180 kW	Turnkey
1035	France	2015	Kaplan	5,5	0,22	1	240	11,2 kW	11,2 kW	Turnkey
1198	France	2015	Pelton	272	0,15	1	679	345 kW	345 kW	Turnkey
1146	Middle East	On going	Pelton	440	0,6	2	1150	2240 kW	4480 kW	Turnkey
1191	Cameroon	On going	Francis	48,32	3,5	2	750	1450 kW	2900 kW	Turnkey
1220-1	France	2016	Pelton	288	1,2	1	870	2940 kW	2940 kW	Refurbishment
1220-2	France	2016	Pelton	305	0,9	1	870	2424 kW	2424 kW	Refurbishment
1139	France	2016	Pelton	441	0,55	1	860	2050 kW	2050 kW	Turnkey
1385	France	2017	Pelton	142,81	0,5	1	1300	560 kW	560 kW	Refurbishment
1354	India	2017	Pelton	289,08	0,264	1	700	685 kW	685 kW	Refurbishment
1400	Switzerland	2016	Pelton	31	0,12	1	373	33 kW	33 kW	Refurbishment
1413-1	Scotland	2017	Pelton	113,6	0,445	1	585	449 kW	449 kW	Turnkey
1413-2	Scotland	2017	Pelton	71,15	0,868	1	675	548 kW	548 kW	Turnkey
1449	France	2017	Pelton	400	0,122	1	797	420 kW	420 kW	Turnkey
1439	DRC	On going	Pelton	197	0,8	1	930	1400 kW	1400 kW	Turnkey
1224	DRC	On going	Pelton	240	3,5	2	1490	7475 kW	14950 kW	Turnkey
1258-2	India	On going	Pelton	147,3	1,46	1	1030	1900 kW	1900 kW	Turnkey
1258-3	Philippines	On going	Francis	55,52	2	2	490	980 kW	1960 kW	Turnkey
1380	France	On going	Pelton	123,12	1,5	2	885	1645 kW	3290 kW	Turnkey
1443	France	2017	Kaplan	12	1,5	1	530	160 kW	160 kW	Refurbishment
1512	France	On going	Pelton	93,87	1,65	2	920	1365 kW	2730 kW	Turnkey
1504	Madagascar	On going	Francis	70,52	0,67	1	390	415 kW	415 kW	Turnkey
1318	Rwanda	On going	Pelton	80	0,4	1	614	281 kW	281 kW	Turnkey
1326	France	On-going	Kaplan	11	15	1	1650	1500 kW	1500 kW	Turnkey
1562	Madagascar	On going	Francis	141,93	0,5	1	320	635 kW	635 kW	Turnkey
1481	France	On-going	Francis	31,5	1,55	1	550	436 kW	436 kW	Refurbishment
1558	France	On-going	Pelton	320	3,2	1	-	9050 kW	9050 kW	Refurbishment
1591	France	On-going	Pelton	140	0,5	1	620	620 kW	620 kW	Refurbishment
1668	France	On-going	Francis	21	2	1	670	370 kW	370 kW	Refurbishment
1313	France	On-going	Pelton	415	1,1	1	840	3900 kW	3900 kW	Turnkey
1577	Comoros	On-going	Francis	27	1,5	1	500	360 kW	360 kW	Refurbishment
1577	Comoros	On-going	Francis	32	1	1	450	290 kW	290 kW	Refurbishment
1577	Comoros	On-going	Crossflow	17,5	0,1	1	290	14 kW	14 kW	Refurbishment
1637	France	On-going	Pelton	340	0,48	1	770	1440 kW	1440 kW	Refurbishment