

**Reference list of generators for SHPP**

Item	Supplied to	Power station	Pcs	Capacity (kVA)	Voltage (V)	Freq (Hz)	Rated speed (rpm)	Runaway speed (rpm)	Turbine type	Form	Year of manufacture	Construction type	Remarks
1	NORWAY	TORSNES	1	10400	6600	50	600	1080	PELTON	V	2013	6SBV6 1120M1-10	
2	NORWAY	STEINSVIK	1	10380	6600	50	1000	1860	PELTON	H	2008	6SBV6 1000M-6	
3	ITALY	MOSSO IN PASSIRIA	2	7500	6300	50	750	1350	PELTON	H	2006	6SBV6 900M2-8	
4	NORWAY	REKVATN	1	7100	6600	50	750	1200	FRANCIS	H	2011	6SBV6 900M2-8	
5	INDONESIA	AMPELGADING	2	6540	6600	50	1000	1710	FRANCIS	V	2009	6SBO6 800S2-6	
6	NORWAY	STAMPELVA	1	6400	6600	50	1000	1800	PELTON	V	2020	6SBV6 800M1-6	
7	NORWAY	KVAESANI	1	6325	6600	50	1000	1830	PELTON	V	2010	6SBV6 800S2-6	
8	GUINEA	GRANDES CHUTES	2	6300	6600	50	600	1830	FRANCIS	H	2020	6SBV3 900S2-10	
9	PHILIPPINES	TAFT	3	5900	6300	50	400	800	FRANCIS	V	2021	6SBO6 1000M-18	
10	BiH	DUB	2	5800	6300	50	600	1100	FRANCIS	H	2017	6SBO6 900M2-10	
11	NORWAY	RASDALEN	1	5490	6600	50	750	1150	PELTON	V	2009	6SBV6 900-8	
12	BULGARIA	VACHA	1	5400	6300	50	500	880	FRANCIS	V	2021	6SCO6 1000S1-12	Static excitation
13	MALAYSIA	SUNGAI SELAMA	2	5300	6300	50	429	771	PELTON	V	2021	6SBO6 900M2-14	
14	NORWAY	N. GROSLANDESELV	1	5230	6600	50	600	1052	PELTON	V	2018	6SBV6 900S1-10	
15	IRAN	SHAHID RAJAE	3	5200	6300	50	750	1380	FRANCIS	V	2007	6SBV6 900-8	
16	SWITZERLAND	AUGAND	2	5200	6300	50	429	102	KAPLAN	H	*	6SBV6 1000M1-14	
17	JAPAN	SHIN SAKAGAMI	1	5200	6600	60	240	576	KAPLAN	V	*	6SBO6 1250M1-30	
18	JAPAN	SHIN UTSUBO	1	5200	6600	60	240	576	KAPLAN	V	*	6SBO6 1250M1-30	
19	SWITZERLAND	RASOIRA	1	5000	6300	50	375	1050	KAPLAN	V	2021	6SBV6 1000S2-16	
20	NORWAY	LANGDALSELVA	1	4900	6600	50	600	1135	PELTON	V	2012	6SBV6 900S2-10	
21	NORWAY	VANNDOLA	1	4750	6600	50	1000	1860	PELTON	H	2008	6SBV6 710M2-6	
22	BiH	USTIPRAČA	2	4400	6300	50	500	900	FRANCIS	H	2015	6SBO6 900M1-12	
23	NORWAY	REINAGA	1	4350	6600	50	1000	1870	PELTON	V	2014	6SBV6 800S1-6	
24	NORWAY	BRUVOLLELVA	1	4335	6600	50	750	1500	FRANCIS	H	2009	6SBV6 710M2-8	
25	NORWAY	TVEITASKAR	1	4312	6600	50	750	1400	PELTON	V	2009	6SBV6 800S1-8	
26	NORWAY	PALMAFOSSEN	1	4200	6600	50	231	646	KAPLAN	V	2021	6SBV6 1120M2-26	
27	BiH	NOVAKOVIĆI 1	1	4200	6300	50	750	1265	FRANCIS	H	2011	6SBO6 710M2-8	
28	NORWAY	BOEN FOSS	1	4100	6300	50	231	644	KAPLAN	V	2020	6SBV6 1120M2-26	
29	USA	MADISON DAM	4	4100	4000	60	300	586	FRANCIS	H	2020	6SBO4 1120S2-24	
30	BULGARIA	BANITE	1	4000	6300	50	750	1480	FRANCIS	H	2009	6SBV6 710M2-8	
31	INDONESIA	TANGKA	2	4000	6300	50	1000	1800	FRANCIS	H	2020	6SBO6 710S2-6	
32	NORWAY	MANNBERG	1	3940	6600	50	1000	1720	PELTON	H	2015	6SBV6 710S2-6	
33	ICELAND	BJOLFSVIRKJUN	2	3900	6600	50	750	1350	PELTON	H	2007	6SBO6 710M2-8	
34	NORWAY	MIDTLEGRE	1	3855	6600	50	1000	1800	PELTON	H	2015	6SBV6 710S2-6	
35	PHILIPPINES	MATUNO	3	3800	6300	60	400	880	KAPLAN	V	2020	6SBO6 900M1-18	
36	ALBANIA	RAPUNI 3&4	3	3780	6300	50	429	800	FRANCIS	H	2015	6SBO6 900M1-14	
37	SWEDEN	SEMLA	1	3750	3300	50	250	641	KAPLAN	B	2017	SB 2507-24	
38	NORWAY	BYRO	1	3550	6600	50	1000	1850	PELTON	V	2015	6SBV6 710M1-6	
39	SLOVENIA	DUBRAVA	1	3500	10500	50	750	1300	PELTON	H	2007	6SBO0 710M3-8B	
40	TURKEY	GENERAL	2	3500	6300	50	1000	2000	FRANCIS	H	2012	6SBO6 710M1-6	
41	NEW ZEALAND	DEEP STREAM	2	3500	690	50	1000	1950	FRANCIS	H	2007	6SBO1 630M2-6	
42	NORWAY	STUBLIELVA	1	3300	6600	50	750	1520	PELTON	V	2014	6SBO6 710M2-8	
43	PHILIPPINES	TIBAG	2	3300	6300	60	900	1719	FRANCIS	H	*	6SBO6 710S1-8	
44	BiH	LUKAČ	1	3200	6300	50	600	1160	FRANCIS	V	2008	6SBO6 710M2-10	
45	NORWAY	KALDSANI	1	3120	6600	50	750	1320	PELTON	V	2014	6SBO6 710M2-8	
46	NORWAY	VASSVIKELVA	1	3100	6600	50	1000	1750	PELTON	V	2014	6SBO6 710S2-6	
47	PHILIPPINES	DAVAO	1	3030	2400	60	900	1910	FRANCIS	H	2021	6SBO2 710S1-8	
48	GERMANY	ROTHENFELS	1	3020	6300	50	130	395	KAPLAN	B	2017	SB 3159-46	
49	NORWAY	SORDALSELVA	1	3000	6600	50	600	1050	PELTON	V	2016	6SBO6 800S2-10	
50	AUSTRIA	OVELLA	1	3000	3300	50	272.7	780	KAPLAN	H	*	SB 1809-22	
51	BiH	MAJDAN	1	3000	6300	50	1000	1300	PELTON	H	2004	6SBO6 630M2-6	
52	GEORGIA	AKHALKALAKI 1	3	3000	6300	50	600	1260	FRANCIS	H	2021	6SBO6 710M2-10	
53	ITALY	CASTIGLIONE	2	2800	6300	50	750	1275	FRANCIS	V	2005	6SBO6 710M1-8	

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54	ITALY	MONTALTO DORA 2	1	2500	6300	50	300	709	KAPLAN	V	2006	6SBO6 1000M-20	
55	ITALY	BESSE 2	1	2300	6000	50	500	1075	FRANCIS	V	2007	6SBV6 710M2-12	
56	SLOVENIA	MELJE	1	2250	400	50	250	585	KAPLAN	V	2008	6SBO1 1250M1-24	
57	ICELAND	BJOLFSVIRKJUN	2	2200	6600	50	500	900	PELTON	H	2007	6SBO6 710M1-12	
58	ITALY	SEDA	1	2200	6300	50	500	800	PELTON	V	2004	6SBO6 710M2-12	
59	NORWAY	SOLIA	1	2177	6600	50	600	1095	FRANCIS	H	2015	6SBO6 710S1-10	
60	BiH	NOVAKOVIĆI 2	1	2150	6300	50	1000	1670	FRANCIS	H	2011	6SBO6 630M1-6	
61	NORWAY	BORDALSBEKKEN	1	2050	690	50	750	1322	PELTON	V	2012	6SBO1 630S2-8	
62	NORWAY	HOMMSANI	1	2020	690	50	750	1350	PELTON	V	2013	6SBO1 630S2-8	
63	ROMANIA	SAFRA	1	2000	6300	50	1000	1998	PELTON	V	2013	6SBV6 630M1-6	
64	GEORGIA	AKHALKALAKI 2	1	2000	6300	50	750	1525	FRANCIS	H	2021	6SBO6 630M1-8	
65	SLOVAKIA	ZELIEZOVCE	2	1990	690	50	231	655	KAPLAN	B	2015	6SBO1 1250S1-26	
66	FINLAND	KISSAKOSKI	1	1890	690	50	188	550	KAPLAN	B	2012	6SBO1 1120-32	
67	SLOVENIA	SAVA	2	1800	6300	50	600	1600	KAPLAN	V	2008	6SBV6 630M2-10	
68	SWEDEN	BANGBRO	1	1800	690	50	600	1200	FRANCIS	V	2005	6SBO1 630M1-10	
69	BiH	MUJAKOVIĆI	1	1800	400	50	750	1300	PELTON	H	2004	6SBO1 560L-8	
70	BiH	POLJANICA 1	2	1800	400	50	750	1300	PELTON	H	2005	6SBO1 560L-8	
71	BiH	MUJADA	1	1800	400	50	750	1300	PELTON	H	2005	6SBO1 560L-8	
72	BiH	TREŠANICA	1	1750	400	50	600	1080	KAPLAN	V	2007	6SBO1 630M1-10	
73	ITALY	SILEA	2	1700	6000	50	107	270	KAPLAN	V	2007	6SBO6 1250-56	
74	NORWAY	TYTTEBERELVA	1	1600	690	50	429	790	PELTON	V	2013	6SBO1 710S2-14	
75	ROMANIA	GOZNA	2	1600	6300	50	750	1405	FRANCIS	H	2013	6SBV6 630S2-8	
76	CROATIA	PRANČEVIĆI	1	1600	6300	50	429	943	FRANCIS	H	2014	6SBO6 710M1-14	
77	NORWAY	KVINSDAL	1	1500	660	50	1000	2000	PELTON	V	2006	6SBO1 560S1-6	
78	SWEDEN	ADOLFSFORS	1	1500	690	50	250	580	FRANCIS	V	2005	6SBO1 900M-24	
79	BiH	BOTUN	1	1500	400	50	1000	1700	PELTON	H	2004	6SBO1 560M2-6	
80	BiH	JEZERNICA	1	1500	400	50	1000	1700	PELTON	H	2004	6SBO1 560M1-6	
81	BiH	VITEZ	1	1500	6300	50	300	700	KAPLAN	V	2006	6SBO6 800M2-20	
82	CROATIA	ZAKUČAC	2	1500	400	50	750	1350	PELTON	H	2003	S 1253-8	Static excitation
83	SWITZERLAND	RUHLIG	1	1425	6300	50	750	2548	KAPLAN	H	2014	SB 1127-8	
84	CROATIA	LEŠĆE	1	1320	400	50	750	1365	FRANCIS	H	2009	6SBO1 630M-8	
85	CROATIA	DUBROVNIK	2	1300	400	50	1000	1800	PELTON	H	2017	6SCO1 560S1-6	Static excitation
86	ITALY	BESSE 1	1	1300	6000	50	600	1200	FRANCIS	V	2007	6SBV6 630S2-10	
87	SWITZERLAND	ETTISBUEHL	1	1240	400	50	231	696	KAPLAN	V	2010	6SBO1 900S-26	
88	UNITED KINGDOM	YSTRADFFIN	1	1170	690	50	750	1450	FRANCIS	H	2020	6SBO1 500M2-8	
89	TURKEY	DINC 1	1	1150	400	50	750	1350	PELTON	H	2011	6SBO1 560S1-8	
90	TURKEY	DINC 2	1	1100	400	50	429	775	PELTON	V	2011	6SBO1 630M1-14	
91	BiH	DO	2	1100	400	50	500	1000	KAPLAN	V	2015	6SBO1 630S1-12	
92	ITALY	CRESPI 5	1	1100	400	50	375	825	KAPLAN	V	2007	6SBO1 630M1-16	
93	ITALY	CRESPI 3	1	1100	400	50	375	975	KAPLAN	V	2007	6SBO1 630M2-16	
94	AUSTRIA	HAUNOLDMUEHLE	2	900	400	50	214	500	KAPLAN	V	2019	6SBO1 900S1-28	
95	ITALY	BRUGNETO 2	1	900	400	50	757	1400	FRANCIS	H	2006	6AGO1 500S3-8	AS.GEN.
96	BiH	PODKOZICA	1	863	400	50	1000	1550	PELTON	H	2005	6SBO1 450M2-6	
97	BiH	POLANICA 2	2	850	400	50	1000	1800	FRANCIS	H	2005	6SBO1 450-6	
98	FINLAND	PUHOS	1	850	400	50	150	300	KAPLAN	H	2020	6SBO1 1000S1-40	
99	ITALY	LAVOREIT	1	845	400	50	750	1350	FRANCIS	V	2019	6SBO1 500S1-8	
100	UNITED KINGDOM	YSTRADFFIN	1	820	690	50	750	1650	FRANCIS	H	2020	6SBO1 500S2-8	
101	SWEDEN	ARJEPLOG	1	800	690	50	150	424	KAPLAN	B	2013	6SBO1 1120S1-40	
102	ITALY	VAL MAIRA	2	800	400	50	1000	1800	FRANCIS	V	2004	6SBO1 500M-6	
103	AUSTRIA	SCHALDORF	2	750	690	50	200	530	KAPLAN	V	2012	6SBO1 800S1-30	
104	AUSTRIA	OFFNER LAVANT	1	750	400	50	375	938	KAPLAN	V	2015	6SBO1 560M2-16	
105	NORTH MACEDONIA	LUKAR	1	750	400	50	750	1275	PELTON	H	2000	40SB S904-8	
106	BiH	DUŠČICA	1	640	400	50	750	1350	FRANCIS	H	2012	6SBO1 450M2-8	

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107	SLOVENIA	STRUGE	1	620	400	50	333	550	KAPLAN	V	2005	6SBO1 630M2-18	
108	KENYA	KIANTHUMBI	1	600	400	50	600	1200	FRANCIS	H	2020	6SBO1 500S1-10	
109	CROATIA	VARAŽDIN	1	580	400	50	757	1900	KAPLAN	V	2014	6AGO1 500S1-8	AS.GEN.
110	BULGARIA	DRAGOVISHTICA	1	550	6300	50	508	980	FRANCIS	H	2009	6AGO6a 500M1-12	AS.GEN.
111	ITALY	CONSUVERO	2	550	3000	50	275	930	PELTON	V	2005	6SBO3 500M-16	
112	JAPAN	SHIN UTSUBO	1	546	6600	60	366	774	FRANCIS	H	*	6AGO6 630S2-20	AS.GEN.
113	ITALY	CRESPI 2	1	500	400	50	250	700	KAPLAN	V	2006	6SBO1 630M2-24	
114	ITALY	CERETTO	1	500	400	50	221	625	KAPLAN	V	2006	6AGO1 710M2-28	AS.GEN.
115	ITALY	BALANGERO	1	500	400	50	508	1200	KAPLAN	V	2007	6AGO1 500S1-12	AS.GEN.
116	ITALY	PICEGLIE 1	1	450	400	50	758	1250	KAPLAN	H	2004	6AOG 407-08	AS.GEN.
117	BiH	POSUŠJE	1	430	400	50	600	1080	PELTON	V	2019	6SBO1 450M2-10	
118	BULGARIA	VODEV CHARK	1	420	6300	50	1010	1950	PELTON	H	2013	9AOG 407-06	AS.GEN.
119	ITALY	VILLANOVETTA	1	400	400	50	600	1300	KAPLAN	V	2004	6SBO1 450M2-12	
120	ITALY	SALTO BRUNENGA	1	400	400	50	434	1100	KAPLAN	V	2006	5AGO1 500S2-14	AS.GEN.
121	ITALY	SUSSA 2	1	350	400	50	308	600	KAPLAN	V	2006	6AGO1 560S2-20	AS.GEN.
122	ITALY	DOMPE 1	1	320	400	50	382	790	KAPLAN	V	2004	6AGO1 500S2-16	AS.GEN.
123	ITALY	SANTA ANNA	1	300	400	50	235	510	KAPLAN	V	2007	6AGO1 630S2-26	AS.GEN.
124	ITALY	BERSANA	1	270	500	50	610	1350	PELTON	V	2004	6AOG 404-10	AS.GEN.
125	ITALY	AGISTROU 3	1	250	400	50	1011	1700	FRANCIS	H	2004	6AOG 319-06	AS.GEN.
126	ITALY	DOMPE 2	1	250	400	50	508	1400	PELTON	V	2005	6AOG 407-12	AS.GEN.
127	CROATIA	PLETERNICA	1	230	400	50	250	450	KAPLAN	V	2012	6SBO1 560S1-24	
128	CROATIA	VELIKA VRANOVINA	1	200	400	50	1515	2350	PELTON	H	2013	6AZG 318-04	AS.GEN.
129	ITALY	MATHIE	1	200	400	50	1010	1800	FRANCIS	H	2005	6AOG 318-06	AS.GEN.
130	SLOVENIA	GRMOV VRH	1	170	400	50	1009	1009	PELTON	H	2013	6AOG 318-06	AS.GEN.
131	ITALY	PIEVE DI TECO	1	150	400	50	435	1100	KAPLAN	V	2013	6AOG 404-14	AS.GEN.
132	ITALY	ECOLUBE	1	140	400	50	339	750	KAPLAN	V	2005	6AOG 407-18	AS.GEN.
133	SLOVENIA	RAZTEŽILNIK	1	132	380	50	1012	1012		H	2011	6AOG 314-06	AS.GEN.
134	ITALY	SEDESANE	1	110	400	50	1015	1700	PELTON	H	2015	6AOG 311-06	AS.GEN.
135	AUSTRIA	SCHMIDLEITHNER	1	100	400	50	750	1400		V	2013	6AOG 314-08	AS.GEN.
136	CROATIA	VELIKA SUMA	1	90	400	50	750	900	PELTON	H	2016	6AZG 317-08	AS.GEN.

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\* under manufacturing

Form V-vertical; H-horizontal; B-bulb