

ELECTRIC POWER CORPORATION RENEWABLE ENERGY DEVELOPMENT PROGRAM

GENERATION MIX

UPOLU AND SAVAII

No	Location	Owner/Operators	Installed Capacity MW ac	Annual Generation mi. KWH	Liters of diesel fuel avoided by renewable pa	Status at March 2018
1	Faleolo Airport solar	IPP-Sun Pacific Energy	2.07	3.17	792,500	In service
2	Faleolo Airport solar	IPP Sun Pacific Energy	1.50	1.97	492,750	additional 1.5MW solar under construction, scheduled to be in service in March 2018
3	Faleolo Airport solar	IPP-Green Power Samoa	2.00	3.50	875,000	In service
4	Faleolo Airport solar	IPP-Solar for Samoa	2.81	3.50	875,000	In service
5	Race Course solar	IPP-Green Power Samoa	2.55	3.47	866,592	In service
6	Race Course solar	IPP-Solar for Samoa	1.50	2.10	525,600	In service
7	Afiamalu - 10MW wind plus 10MW pump storage hydro; but guarantee 7.5MW	IPP-Shanghai E Power	7.5	48.00	12,000,000	Planning; permitting; land acquisition, and design stage. Performance Bond submitted. Co. processing application to Office of Regulator for Generation License
8	Taelefaga hydro - 2 x 2MW gens	EPC	4.00	22.60	5,650,000	In service
9	Taelefaga hydro plant additional 3rd gen.	EPC	2.00	2.27	567,500	Contract awarded in Feb. 2018; scheduled to be completed in Dec 2018
10	Lalomauga hydro - 2 x 1.75MW gens	EPC	3.75	8.20	2,050,000	In service
11	Samasoni hydro	EPC	1.90	2.20	550,000	In service since 20th Dec 2017
12	Fale ole Fee hydro	EPC	1.75	4.20	1,050,000	In service since Sept. 2017
13	Alaoa hydro	EPC	1.05	3.90	975,000	In service since March 2017
14	Tafitoala/Fausaga hydro	EPC	0.481	1.82	455,000	Under construction. Scheduled to be completed in June 2018
15	Fuluasou hydro	EPC	0.73	2.58	645,000	under construction, scheduled to be completed and put in service in August 2018
16	Vailoa Wind Farm - 2 x 275kw gens	EPC	0.55	0.20	50,000	In service
17	Racecourse solar, 2.2kWp	EPC - 2.2MW ground mounted solar system inside Racecourse	1.76	3.48	870,000	In service
18	Gym3 roof mounted solar, 240kWp	EPC	0.19	0.37	92,500	In service
19	Vaitete solar, 250kWp ground mounted	EPC	0.25	0.33	82,500	In service
20	Tanumanono solar, 150kWp grounded mounted	EPC	0.15	0.20	50,000	In service
21	Vaipu pump scheme	EPC		0.769	192,250	Preparing bid to be issued in March 2018
22	Afolau 750kW Biomass Gasification Power Plant	Partnership - EPC/STEC/MNRE	0.75	2.00	500,000	advertised and issued bid on 10th March 2018; bid closes on 7th May 2018, contract signed on August 2018, construction completed and tested on October 2019
24	Multi-purpose Alaoa flood control dam	Partnership - EPC/SWA/MNRE	1.00	4.00	1,000,000	Hired Entura Consultant and started feasibility study in January 2018;
Total Renewable Energy Capacity & Generation			39.24	124.83	31,207,192	
Upolu System Peak & Energy Demand, MW			25.00	156.00		
% RE Penetration			157%	80%		
Energy shortfall				31.17		

	Battery Energy Storage System (BESS) - Fiaga	EPC	6.00	10.2 MWh		Completed and in service
	Battery Energy Storage System (BESS) - Faleolo Airport	EPC	2.00	3.4 kWh		Completed and in service
SAVAII						
No	Location	Owner/Operator	Installed Capacity, MWac	Annual Generation mi. KWH		Status at March 2018
1	Salelologa solar, 143kWp, GoNZ	EPC	0.11	0.17	43,000	In service
2	Salelologa solar, JICA,	EPC	0.12	0.16	39,500	In service
3	Faleata, hydro	EPC	0.20	0.50	125,000	Under constructon, scheduled to be completed in August 2018
4	Planned base load RE generating plant	IPP	4.00	12.00	3,000,000	Advertisement of bid is on hold
5						
Total Renewable Energy Capacity & Generation			4.43	12.83	3,207,500	
Savaii System Peak & Annual Energy Demand			2.80	13.00		
% RE Penetration			158%	100%		