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LAMPIRAN

LAMPIRAN

1. Jenis Alat Dan Bahan

1. Pemasangan Panel Surya



2. Pemasangan Turbin Angin



3. Pemasangan Mikro Hidro



2. Simulasi Sistem Pembangkit Microgrid Renewable Energi yaitu Photovoltaik (PV), Wind Turbin (WT) dan Micro Hidro (MH).

Rankaian Beban Dan Control

Percobaan 1.

Beban 1 ON.



Percobaan 2.

Beban 1 dan 2 ON dan Control.





Percobaan 3.

Beban 1, 2 dan 3 ON, dan Control.



Percobaan 4.

Beban 1, 2 dan 3 dan 4 ON, Control.



Percobaan 5.

Beban 1, 2, 3, 4 dan 5 ON dan Control.





3. Nilai Net Present Cost (NPC)

1. Hibrid Pembangkit PLTS, PLTB

Net Present Costs

Name	Capital	Operating	Replacem ent	Salvage	Resource	Total
AWS HC 650W Wind Turbine	\$2,798	\$517.10	\$892.02	-\$502.71	\$0.00	\$3,704
Generic 1kWh Lead Acid	\$465,900	\$200,764	\$922,453	-\$33,627	\$0.00	\$1.56M
Jinko Eagle PERC60 300W	\$307,429	\$103,580	\$0.00	\$0.00	\$0.00	\$411,009
System Converter	\$43,790	\$0.00	\$18,579	-\$3,497	\$0.00	\$58,872
System	\$819,917	\$304,861	\$941,924	-\$37,626	\$0.00	\$2.03M

2. Hibrid Pembangkit PLTS, PLTB, PLTD

Net Present Costs

Name	Capital	Operating	Replacement	Salvage	Resource	Total
AWS HC 650W Wind Turbine	\$1,399	\$258.55	\$446.01	-\$251.36	\$0.00	\$1,852
CAT-100kVA-50Hz-PP	\$0.00	\$223,600	\$3.56	-\$1.11	\$548,463	\$772,065
Generic 1kWh Lead Acid	\$54,300	\$23,399	\$47,971	-\$6,504	\$0.00	\$119,165
Jinko Eagle PERC60 300W	\$52,168	\$17,577	\$0.00	\$0.00	\$0.00	\$69,745
System Converter	\$13,795	\$0.00	\$5,853	-\$1,102	\$0.00	\$18,546
System	\$121,662	\$264,834	\$54,273	-\$7,858	\$548,463	\$981,374