

HOUSEHOLD POWER PRIORITIES

Record essential devices and realistic daily usage. Priority A = safety, B = essential, C = optional.

HOUSEHOLD PROFILE

Household / location

Assessment date

Next review

People supported

Planned outage duration

Prepared by

ESSENTIAL ELECTRICAL LOADS

Device / system

Priority

Running W

Startup W

Hours/day

Daily Wh

Total daily essential Wh

Contingency allowance Wh

Planning total Wh

For cycling appliances, use measured or manufacturer daily energy consumption rather than maximum running watts times 24 hours.

LIGHTING AND SMALL POWER

Check flashlights, lanterns, radios, power banks, batteries, chargers and cables.

LIGHTING INVENTORY

Equipment / location	Required	Usable	Battery type	Condition	Review date

POWER BANKS AND CHARGING

Item / location	Rated Wh or mAh	Output / cable	Qty usable	Tested?

Missing batteries, cables, adapters or replacements

BATTERY STATIONS AND INVERTERS

Assess capacity, output, startup surge, inverter compatibility and measured runtime.

BATTERY STATION INVENTORY

Station / location	Nominal Wh	Usable Wh	Running W	Surge W	Test date

BATTERY RUNTIME

Estimated runtime (hours) = usable energy (Wh) / connected load (W), assuming a steady load and losses already included.

Usable Wh	Combined load W	Estimated hours
Observed hours	Difference / issue	Follow-up date

Charging methods and equipment compatibility issues

GENERATORS AND FUEL

Fuel-burning generators must operate outdoors, away from doors, windows and vents.

GENERATOR INVENTORY

Generator / location	Running W	Surge W	Fuel type	Condition	Service date

FUEL DURATION CALCULATION

Operating hours = total usable fuel / hourly fuel consumption at the intended load. Include usable fuel in the tank and safely stored containers.

Fuel in tank	Usable stored fuel	Total usable fuel
Fuel use per hour	Estimated operating hours	Planned load W

SAFETY AND MAINTENANCE

Safety / maintenance check	Status	Corrective action	Date

Check transfer equipment, carbon monoxide alarms, outdoor placement, fuel condition, safe refuelling, oil, filters and manufacturer-required interruptions.

SOLAR AND ENERGY BALANCE

Confirm backup-capable solar operation; ordinary grid-tied panels may shut down in an outage.

SOLAR AND CHARGING EQUIPMENT

Panel / controller	Rated W	Connector / input	Test conditions	Usable Wh/day

DAILY ENERGY DEFICIT

Daily deficit (Wh) = essential daily consumption - usable daily replenishment after charging losses.

Essential demand Wh/day	Usable charging Wh/day	Daily deficit Wh
Usable stored Wh	Estimated days at deficit	Poor-weather Wh/day

Solar backup configuration, weather limits and charging dependencies

MEDICAL AND REFRIGERATION

Verify medically essential power arrangements with equipment suppliers and healthcare professionals.

MEDICAL POWER DEPENDENCIES

Essential device	Wh/day	Backup source	Verified?	Contingency / contact

REFRIGERATION AND TEMPERATURE

Appliance / contents	Measured Wh/day	Startup W	Backup source	Temperature plan

Temperature-sensitive medication: professionally confirmed backup arrangements

COMMUNICATION AND HIDDEN LOADS

Include service outages as well as loss of electrical power.

COMMUNICATION DEVICES

Device / location	Power needs	Battery duration	Charging plan	Network alternative

HIDDEN ELECTRICAL DEPENDENCIES

Pump / system	Running W	Startup W	Backup method	Safety / limitations

Qualified electrician / professional assessment needed

MAINTENANCE AND INSPECTION

Inspect condition and follow manufacturer service schedules; remove damaged equipment from use.

EQUIPMENT MAINTENANCE LOG

Equipment	Inspection finding	Service / replacement	Responsible	Next date

Fuel storage, carbon monoxide, damaged wiring and transfer equipment concerns

PRACTICAL EQUIPMENT TEST

Use safe noncritical devices. Never disconnect essential medical equipment for a test.

CONTROLLED RUNTIME TEST

Device tested	Backup source	Date
Expected load W	Expected runtime hours	Starting battery %
Actual load W	Observed runtime hours	Remaining battery %

TEST FINDINGS

Test / check	Pass / issue	Measured result	Correction / owner

Reason for differences between calculated and observed runtime

DAY 1, DAY 7 AND DAY 14

Assess when the first essential capability fails, not when the final battery becomes empty.

SUPPLY DURATION SCENARIOS

Checkpoint	Usable battery Wh	Fuel remaining	Charging Wh/day	First essential shortage

EXPECTED FIRST SHORTAGE

Affected essential system	Estimated day / time	Cause
Reduced solar scenario	Higher demand scenario	Safe alternative
Action before essential capability becomes unavailable		

CORRECTIVE ACTIONS

Prioritize deficiencies affecting essential health, safety and household functions.

PRIORITIZED CORRECTIONS

Deficiency	Affected device	Correction	Priority	Owner	Target date

Verification that the correction resolved the original deficiency

FINAL REVIEW AND READINESS

Retain this completed inventory with household emergency plans; update at least every six months.

READINESS CONFIRMATION

Review item	Complete?	Follow-up / reference

Confirm essential loads, battery and fuel calculations, charging losses, safe generator use, solar backup capability, medical dependencies, testing, and first shortage date.

NEXT INSPECTION

Review completed by	Date	Next review date

Top three actions to complete before the next outage