



An Extended Guide · No. 1322

Choosing Which Circuits to Back Up

Building a smart must-run list

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! Read this first — panel work is a licensed electrician's job

A transfer switch connects to your home's electrical panel, and panel work is among the most dangerous jobs in any house. The power inside a panel can injure or kill even with the lights off, and a wiring mistake can start a fire or push deadly voltage back onto the lines outside, where a utility crew may be working. Installing, moving, or changing a transfer switch is a licensed electrician's job — almost always with a permit and an inspection. It is never a do-it-yourself project, and it is never something I do myself. This guide is here to help you understand, choose, and safely use a transfer switch — not to wire one. And please, never try to shortcut all this by backfeeding a generator through a wall or dryer outlet with a double-ended cord; that shortcut kills people, and a transfer switch is the safe, legal way to do the very thing it tempts you to do. Choosing the list is your job and mine; wiring those circuits to the switch is the licensed electrician's.

Deciding what really needs to stay on

Before an electrician ever opens your panel, you get to decide which circuits your transfer switch will back up. This is your 'must-run' list — and getting it right is one of the most useful things you can do.

I'm Bill. This is my favorite part to help with, because it's really about your life, not electricity — what keeps you warm, fed, safe, and comfortable when the power's out. In this guide I'll show you how to build a thoughtful list, in the right order of priority, without guessing at any numbers.

Your list becomes the hardware: the circuits you choose are the ones the electrician wires to the switch. So it's worth a little thought up front — and it's easy to do once you know how to think about it.

★ Let's build your list together

Bring me a rough idea of what you'd want running in an outage and I'll help you sharpen it into a smart, right-sized list. Call or text (330) 200-8042.

Building your list, on one page

If you remember only these, you'll build a good list.

- ❑ Start with life and safety: medical equipment, winter heat, a sump pump, well water.
- ❑ Then daily essentials: the fridge and freezer, a few lights, phone charging.
- ❑ Then comfort, only if your generator has room: more lights, a TV, the microwave.
- ❑ Skip the giant loads unless you have a big generator: central AC, electric range, electric water heater.
- ❑ Hardwired things (furnace, pump) need the switch; things you plug in can use a cord.
- ❑ Keep the list honest — your generator can only run so much at once.

✓ Needs first, wants last

The whole trick is ordering by importance, then stopping when your generator's capacity runs out. Our sizing guide handles the 'how much' part.

Your list becomes the hardware

This isn't a wish list you can change on a whim — so a little care now pays off for years.

The circuits you choose are the ones your electrician wires to the transfer switch. Add a circuit later, and it usually means another visit. So the list you build shapes what you can power for as long as you own the switch. That's why we take a little time with it rather than rushing.

The good news: most homes' real needs are simpler than folks expect. Once you sort by what truly matters, the list tends to settle into something quite manageable.

✓ **Decide once, rely on it for years**

Think of the list as a one-time decision you'll live with happily — worth an afternoon's thought and a conversation or two.

The priority ladder

The easiest way to build a list is from the most important things down. Here's the ladder I use with folks.

- **Rung 1 — Life and safety:** powered medical equipment, heat in winter, a sump pump if you flood, well water.
- **Rung 2 — Daily essentials:** the refrigerator and freezer, a few lights, a way to charge phones, maybe the internet.
- **Rung 3 — Comfort:** more lighting, a television, the microwave, a fan — if there's room.
- **Off the ladder — the giants:** central air, an electric range, an electric water heater, the clothes dryer.

Start at the top, work down, and stop when your generator's capacity is comfortably used. Our sizing guide shows how to know where that line is.

✓ Climb down, not up

Always fill the most important rung first. If power runs short, you cut from the bottom — comfort — never from safety.

Rung one: life and safety

These are the circuits that protect health and home. They come first, always.

If anyone relies on powered medical equipment, that comes before everything — and please read our medical-equipment guide, because a generator is one layer of a plan, not the whole plan. In winter, heat is a safety matter too; the furnace usually tops the list for our Ohio climate. If your basement floods, the sump pump belongs here. And on a well, the pump is what gives you water at all.

! Medical needs come first — and need a backup plan

Powered medical equipment should be at the top of your list, but never your only safeguard. Keep manufacturer-approved battery backups and a plan to relocate if needed. Our medical-equipment guide covers this with care.

Rung two: daily essentials

Once safety is covered, these are what make an outage livable rather than miserable.

The refrigerator and freezer keep your food from spoiling — our fridge-and-freezer guide explains how long food stays safe and how to cycle power if needed. A few lights in the rooms you actually use go a long way. A way to charge phones keeps you reachable, and many folks add the internet router so they can stay in touch and get information.

You don't need to light the whole house — just the kitchen, a bathroom, and wherever you'll spend the evening. Keeping this rung modest leaves room for your generator to breathe.

✓ A little light is plenty

One or two well-placed circuits of lighting usually feels like a lot during an outage. You don't need every room lit to be comfortable.

Rung three: comfort, if there's room

These are the nice-to-haves — welcome if your generator has capacity to spare after the essentials.

A television for news and company, more lighting, the microwave for a hot meal, a fan in summer. None of these are essential, but they make a long outage more pleasant. Add them only after the important rungs are covered, and be ready to turn them off if you need to bring up something bigger.

✓ Comfort is the flex

Think of comfort items as the give in your plan. When you need to run the well pump or microwave, you pause the TV — easy trade.

The giants to leave off (usually)

A few household items use so much power that they rarely belong on a portable-generator list.

Central air conditioning, an electric range or oven, an electric water heater, and the clothes dryer are the big power-hungry ones. On a typical portable generator, trying to run these will overload it, or leave nothing for anything else. Most folks simply do without them during an outage — warming food in the microwave, skipping laundry, and layering up or cooling off other ways.

If running one of these truly matters to you, that's a conversation about a much larger generator and likely a whole-panel setup — see our whole-panel guide. For most, leaving the giants off is the sensible, safe choice.

! Don't force a giant onto a small generator

Asking a modest generator to run central air or an electric range is a recipe for overloading and frustration. When in doubt, leave the giants off the list.

Two kinds of homes, two sets of needs

The must-run list looks different in town than out on a well — mostly because of water.

If you live in town or the suburbs

In town, city water keeps flowing even when the power's out, so your list centers on heat, food, and light. That's usually a short, manageable list.

- Furnace, fridge and freezer, and a few lights cover most in-town needs.
- No well pump means one big load you don't have to plan around.
- A sump pump may still matter if your basement floods in storms.
- Add phone charging and the internet router to stay connected.

If you are out in the country on a well

Out on a well, no power means no water, so the well pump jumps near the top of the list — right alongside heat and any medical needs. The list is longer, so ordering it well matters more.

- The well pump belongs high on the list — water for drinking, cooking, flushing, and animals.
- A sump pump often matters too, in the same storms that cut power.
- The furnace and fridge still count — rural lists just have more on them.
- Because the list is fuller, sizing the generator to it is especially important — see our sizing guide.

★ On a well? Let's prioritize together

A rural list has more moving parts. Tell me what you've got and I'll help you order it so the essentials always win. Call (330) 200-8042.

How to walk your house and build the list

The easiest way to make a real list is to walk through your home and imagine the power's out.

- ❑ Start in the coldest season: what keeps you warm and safe? Write it down first.
- ❑ Move to the kitchen: fridge, freezer, a way to heat food and charge phones.
- ❑ Note any medical equipment and where it lives.
- ❑ Check the basement: sump pump? Well pressure tank?
- ❑ Pick the rooms you'd actually use at night and note their lights and outlets.

✓ **Imagine a real outage**

Picture a specific stormy evening and walk it through hour by hour. Your real needs show up much more clearly than in the abstract.

Reading your panel's labels

Your list of rooms and appliances has to line up with the circuits in your panel. Here's the gentle way to connect them.

Open your panel's door (just the door — never the cover) and look at the labels beside each breaker. They may say 'Kitchen,' 'Furnace,' 'Bedrooms,' and so on. Match your must-run items to these labels as best you can. If the labels are faded, missing, or wrong — which is common — don't worry; your electrician will sort out exactly which breaker is which during the visit.

This step just gives everyone a head start. You're not wiring anything — only pointing at what matters.

! The door, not the cover

It's perfectly safe to open the little door to read labels. Never remove the inner cover that exposes the wiring — that's live and strictly for the electrician.

Sorting 'must' from 'want'

This simple sort keeps your list honest and your generator happy.

Go through your list and mark each item 'must' or 'want.' A 'must' is something whose loss is a real problem — heat, medical equipment, the well pump, the fridge. A 'want' is something that makes life nicer — the TV, extra lights, the microwave. Musts get wired to the switch for sure; wants get added only if there's room and budget.

✓ Be honest with yourself

It's tempting to call everything a 'must.' The more honest your sort, the better your generator handles the real emergencies.

Hardwired vs. plug-in: what needs the switch

Not everything on your list needs to be on the transfer switch — and knowing which is which can save you money.

Hardwired things — the furnace, a well pump, a sump pump — have no plug, so they can only be powered through the switch. Things you can plug in — a fridge, a lamp, a phone charger — can often be run with a safe outdoor-rated extension cord instead, with no switch circuit needed. Many folks put the hardwired essentials on the switch and handle a few plug-in items with cords.

✓ Save switch circuits for the hardwired stuff

Since cords can reach anything with a plug, you can often keep your switch list focused on the hardwired items — which may let you use a smaller, cheaper switch.

Leave a little room to grow

Since adding circuits later means another visit, it's wise to think a step ahead.

If your budget allows, ask your electrician to include a spare circuit or two on the switch, or to choose a switch with a little extra room. Needs change — a new medical device, a finished basement, a second freezer — and a bit of headroom now saves a callback later. Just balance it against your generator's real capacity; empty switch positions don't help if the generator can't feed them.

✓ A spare position is cheap insurance

Adding one or two extra circuits during the original install is far easier than bringing the electrician back next year.

Bringing your list to the electrician

A clear list makes the electrician's visit faster, cheaper, and more accurate.

Hand your prioritized list to the electrician at the quote visit. They'll confirm which panel breakers match your items, flag anything that's too big for your generator, and tell you how many circuits the switch needs. Coming in with a thoughtful list means fewer surprises and a switch that truly fits your life.

★ I'll help you prepare the list

Want a second set of eyes before the electrician comes? Send me your draft list at (330) 200-8042 and I'll help you tighten it up. No charge for a quick look.

Common list mistakes

A few slip-ups show up again and again. Knowing them keeps your list solid.

- **Making the list too long** for the generator to handle — our sizing guide keeps this honest.
- **Forgetting the well pump** until the first waterless outage — rural homes, put it on early.
- **Overlooking medical equipment** or treating the generator as its only backup.
- **Trying to include a giant** like central air on a modest generator.
- **Skipping the sump pump** and regretting it during a flooding storm.

! The two most-regretted omissions

In my experience, the well pump and the sump pump are the two people most wish they'd included. If they apply to you, put them on early.

A simple way to lay it out

Here's a little framework you can copy onto paper — no numbers required.

Priority	Examples for your home
Life and safety	Medical gear, furnace, sump, well pump
Daily essentials	Fridge, freezer, some lights, phone charging
Comfort (if room)	TV, more lights, microwave, a fan
Leave off	Central air, electric range, water heater, dryer

Fill in the right column with your own specifics, then let your generator's capacity — from the sizing guide — decide how far down you can go.

✓ **Paper beats memory**

Write it down and keep it with your home papers. A written list is easier to discuss with an electrician and to revisit later.

Revisiting your list over time

Your needs today aren't your needs forever, so it's worth a look now and then.

A new medical device, a growing family, a finished basement, a second freezer for the garden harvest — life changes, and your must-run list can change with it. Glance at your list once a year, maybe when you do your seasonal generator check, and note anything new. If a change needs a new circuit, that's a quick call to your electrician.

★ Life changed? Let's revisit

If your household needs have shifted, I'm glad to help you rethink the list and decide whether it's worth adding a circuit. Reach me at (330) 200-8042.

Common Questions

The questions I hear most about building a must-run list.

Q: How many circuits should I back up?

As many as cover your true musts and fit your generator — no more. Start from a prioritized list and let the generator's capacity set the limit. Our sizing guide helps.

Q: Should I put the refrigerator on the switch or use a cord?

Either works, since a fridge has a plug. Many folks use a cord for the fridge and save switch circuits for hardwired items like the furnace and pump.

Q: Can I back up my central air conditioner?

Rarely, on a portable generator — it's a giant load. Most people leave it off. Running it usually means a much larger generator and a whole-panel setup.

Q: What if I forget something important?

Adding a circuit later means another electrician visit, so it's worth including a spare position now. That's cheap insurance against forgetting.

★ Unsure what belongs on your list?

That's exactly what I help with. Call or text (330) 200-8042 and we'll build a smart list together.

How I help with your list

This is one of the most valuable things I do, and it costs you nothing to think it through with me.

I'll sit with you, walk your home, and help you sort your needs into that priority ladder — honestly, with no reason to pad the list. Then I'll help you bring it to a licensed electrician who can confirm the circuits and size the switch. You end up with a plan that fits your real life and your generator, not a guess.

★ Let's make your list

A good list is the foundation of a good setup. Call or text (330) 200-8042 and we'll build yours together, at your pace.

The short version to carry with you

If the details blur, hold onto these.

- ❑ Order by priority: life and safety, then essentials, then comfort.
- ❑ Leave the power-hungry giants off a portable-generator list.
- ❑ Hardwired items need the switch; plug-in items can use a cord.
- ❑ Keep the list honest to your generator's capacity, and leave a little room to grow.

✓ Keep this guide handy

When it's time to talk to an electrician, this page turns your wishes into a clear, ordered list.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made choosing which circuits to back up feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

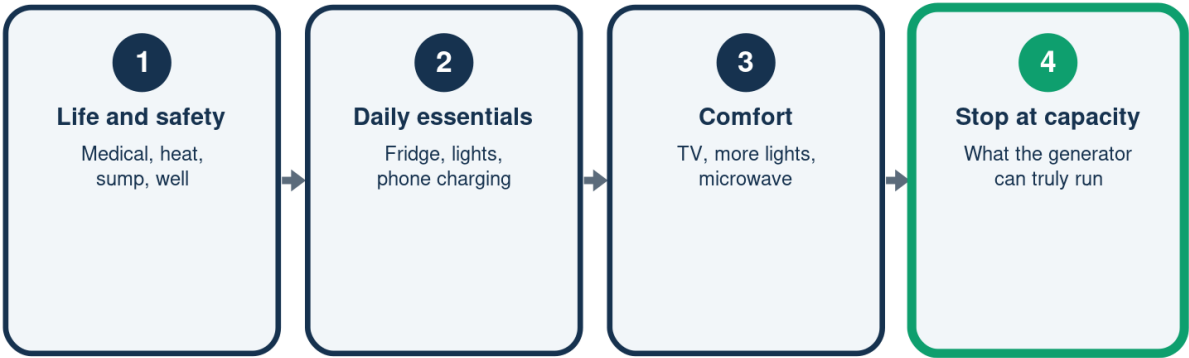
When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't do the licensed electrical or gas work myself — for that I'll help you line up a trustworthy local pro.

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The Priority Ladder

Fill the top rung first, work down



If power runs short, cut from comfort -- never from safety.

What Goes On -- and What Stays Off

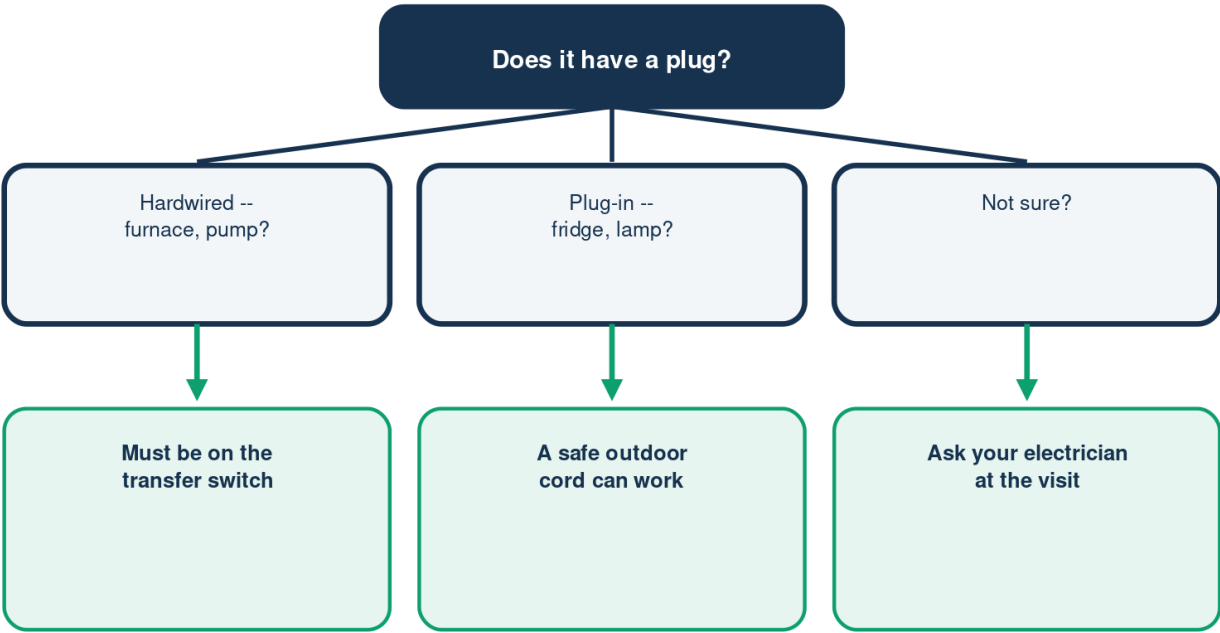
A rough guide for a portable generator

	Usually on	Usually off
Heat	Furnace controls	(central AC off)
Kitchen	Fridge, microwave	(electric range off)
Water	Well or sump pump	(water heater off)
Living	A few lights, TV	(clothes dryer off)

The giants overload a modest generator -- leave them off.

Switch Circuit or Extension Cord?

How to power each item on your list

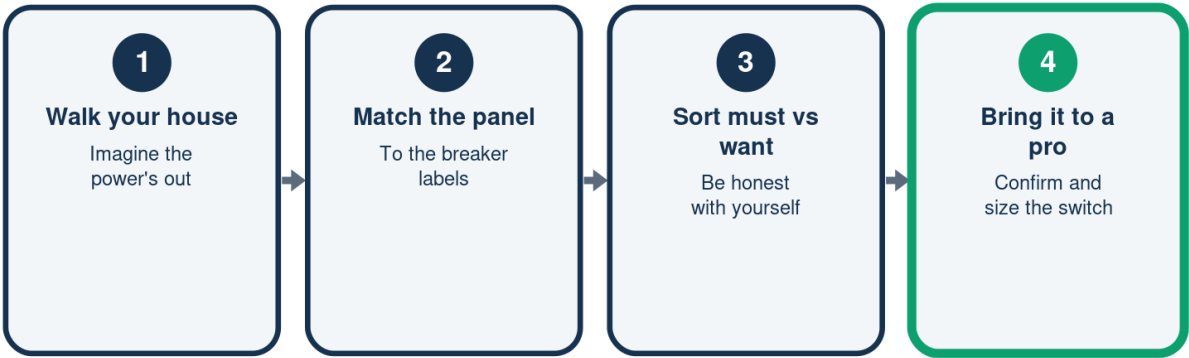


Saving switch circuits for hardwired items may let you use a smaller switch.

Illustration - a schematic, not to scale. Your setup may differ.

Building Your List

A calm way to get it right



A thoughtful list is the foundation of a setup that fits.



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A Note From Bill

A quick note from Bill.

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— *Bill*



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