BILL'S HOME TECH

Home & Small Business Tech Solutions

An Extended Guide · No. 1351

Which Circuits Should Your Transfer Switch Back Up?

Turning your must-run list into a plan

Tech Made Simple — Service Made Personal

BillsHomeTech.com · (330) 200-8042 · Atwater, Ohio

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! Read this first — this is licensed electrician's work

An automatic transfer switch is wired straight into your home's main electrical panel and works hand in hand with a standby generator. That makes installing one a licensed electrician's job from start to finish — almost always with a permit and an inspection — and never a do-it-yourself project. A big part of what the switch does is keep your generator's power from ever backfeeding onto the utility lines, which protects the crews working to bring your power back. Getting that right is exactly why the work belongs to a licensed pro. My job is to help you understand it, choose it, and live with it — not to open your panel. Your list becomes the circuits an electrician wires to your switch — so the planning is yours, but the wiring is always theirs.

Deciding what stays on

Before any equipment is chosen or installed, there's one job that's truly yours: deciding what you want to keep running when the power goes out. This guide helps you build that must-run list — the single most useful thing you can do to get backup power right.

I'm Bill, and I help folks in Portage County think this through at their kitchen tables, in plain English. Your must-run list is the whole ballgame: it decides the size of your system, its cost, and whether it actually keeps you comfortable. And happily, making it takes nothing but a walk through your home and a little honest thought.

You don't need to know a single technical thing to do this well. You just need to know your own home and what matters most to you — which nobody knows better than you.

★ Let's build it together

If you'd like a hand turning 'what matters' into a real list, that's one of my favorite things to help with. Call or text me at (330) 200-8042 — free, and no pressure.

The whole guide, on one page

If you remember only these things, you can build a good list.

- ❑ Walk your home and ask: 'In a two-day outage, what would I truly want working?'
- ❑ Most lists sort into three levels — the essentials, some comfort, and most of the house.
- ❑ Don't forget the quiet-but-vital ones: sump pump, well pump, medical devices, internet.
- ❑ Sort each item into 'must run' and 'nice to have.'
- ❑ Your list decides the whole system — size, cost, and whether it keeps you comfortable.
- ❑ Your electrician wires the chosen circuits; you just decide what they are.

> **✔ The one job that's yours**
> Almost everything else about backup power is the professional's job. This list is yours — and getting it right is the biggest favor you can do your future self.

Start with a walk through your home

The best list comes not from a form, but from actually walking your rooms and picturing an outage.

Go room to room, in your mind or on your feet, and ask of each thing: 'If the power were out for two days in the worst season, would I truly want this working?' The kitchen, the furnace, the bathroom, the basement, the bedroom where someone sleeps with a medical device — let each room tell you what matters.

Write it all down as you go. Don't judge or trim yet — just capture. You'll sort and prioritize afterward. A list on the back of an envelope, made this way, is worth more than any generic checklist.

> **✔ Picture the worst season, not a mild day**
> Imagine the outage in January's cold or August's heat, not a pleasant afternoon. That's the scenario your list needs to serve — and it makes the truly important things obvious.

Level one — the essentials

Almost every list starts here: the things that keep you safe, fed, warm, and connected.

The refrigerator and freezer, so food stays safe. A few lights, so you're not in the dark. Phones and a tablet charging, and the internet box, so you stay connected and can call for help. The furnace's blower or the boiler, so the house stays warm. And any medical device someone depends on — more on that in our guide on backing up medical equipment.

For homes on a well, the well pump belongs here too — without it, there's no water at all. And a sump pump, if a wet basement is a risk. These essentials are the heart of the list, and a modest system can usually cover them.

> **✔ Safety and health come first**
> When you're sorting, let safety and health lead — heat, water, food safety, and any medical need. Comfort can wait a beat; these usually can't.

Level two — comfort

Once the essentials are covered, think about what turns 'getting by' into 'living comfortably.'

This is where you add things like a window or central air conditioner for a summer outage, the microwave and coffee maker, more lights and outlets, perhaps the television. None of these are strictly necessary, but together they make an outage feel far less like camping.

Adding comfort loads nudges you toward a larger system, or toward a managed one that lets these bigger appliances take turns. Our whole-home-versus-managed guide covers how that choice plays out.

> **✔ Comfort is a fair thing to want**
> There's no virtue in suffering through an outage if you can afford not to. If air conditioning in a heat wave matters to you, put it on the list and let the pros size for it.

Level three — most or all of the house

At the top end, you simply want the outage to be invisible — everything on, as usual.

Here you add the big electric appliances: the range and oven, the electric water heater, the clothes dryer, central air. Running all of these means either a large whole-home system or a managed one that has them take turns. It's the most seamless experience, at the highest cost.

Most folks don't need this level — but if you want it, it's a perfectly valid choice. The key is deciding honestly whether you'd truly use it, or whether the essentials plus a little comfort would keep you just as happy for less.

> **✔ Want it all? Ask about managed first**
> Even if you want everything covered, ask your electrician to price a managed system alongside whole-home. You may get nearly the same experience for meaningfully less.

The loads people forget

A few important things slip off lists again and again. Don't let them slip off yours.

- **The sump pump:** in a rainy outage, a dead sump pump means a flooded basement. Easy to forget until it's too late.
- **The well pump:** for well homes, this is water itself — drinking, cooking, flushing. Never leave it off a rural list.
- **Medical devices:** anything someone depends on to breathe, sleep, or stay well. See our medical-equipment guide.
- **The internet and phones:** your lifeline for information and for calling for help in an emergency.
- **The garage door opener,** if that's your only way in and out with a car.

> **! The sump pump is the classic miss**
> Of everything folks forget, the sump pump causes the most heartache — a backup that ran the fridge beautifully while the basement flooded. If you have one, put it on the list.

Water: the well pump and sump pump

For many homes, especially rural ones, water is the reason to have backup power at all — so it deserves its own thought.

If you're on a private well, the pump is non-negotiable: no power means no water for drinking, cooking, flushing, or animals. It's a big starting load, which shapes your whole system, so flag it early. Our guide on backing up the well pump, furnace, and sump pump covers this in depth.

A sump pump matters differently but just as much: in a storm, it's what keeps your basement dry. Since outages and heavy rain often arrive together, a sump pump belongs on the list of anyone with a wet-basement risk — well or no well.

> **✔ Water is worth prioritizing**
> When you rank your list, water usually earns a top spot — both the well pump that supplies it and the sump pump that keeps it out of your basement.

Heat: the furnace, boiler, and beyond

In our Ohio winters, heat is often the essential that matters most — and it's easy to misjudge.

Even a gas furnace or boiler needs electricity to run its blower, controls, and pump — so without backup power, the heat stops even though the fuel is there. Putting the furnace on your list keeps the house warm and your pipes from freezing in a long winter outage.

If you heat with something electric, or supplement with electric space heaters, that's a bigger load to weigh — worth discussing with your electrician, since it can push your system size up. Either way, don't assume heat 'just works' without power; usually it doesn't.

> **✔ Heat protects your home, too**
> Backing up the furnace isn't only about comfort — it's about keeping pipes from freezing and bursting in a cold-weather outage. That makes it a genuine essential, not a luxury.

Two kinds of homes, two sets of needs

The must-run list looks quite different depending on where you live — mostly because of water, which the city handles for some homes and the well pump handles for others.

If you live in town or the suburbs

In town or the suburbs, city water flows no matter what, so your list leans toward food, heat, light, and connection. That's often a lighter list that a modest or managed system covers comfortably.

- No well pump means water isn't on your list — a lighter load overall.
- Essentials are usually fridge, furnace, some lights, internet, and a sump pump if you have one.
- A managed, essentials setup often covers a town list nicely for less.
- Comfort loads like a window AC are easy to add if a summer outage worries you.

If you are out in the country on a well

Out in the country on a well, water tops the list — the well pump for supply and the sump pump for a dry basement — alongside heat and food. It's a heavier list, and the well pump's big starting load shapes the whole system.

- The well pump is essential and demanding — water itself depends on it, and it's a big starting load.
- A sump pump is often vital too, since rural outages and storms arrive together.
- Heat, food, and a way to communicate round out a rural essentials list.
- Because the list is heavier, load management often helps a right-sized generator carry it all.

> **★ On a well? Water leads your list**
> Tell me whether you're on a well and what worries you most in an outage, and I'll help you build a list that truly fits your home. Call (330) 200-8042.

Sorting 'must' from 'want'

Once you've captured everything, the useful step is ranking it — gently, without agonizing.

Go back through your list and mark each item 'must run' or 'nice to have.' Heat, water, food safety, and medical needs usually land in 'must.' The television, the second air conditioner, the dryer often land in 'nice to have.' This ranking is exactly what your electrician needs to size the system and set any load-management priorities.

You don't need a perfect ranking — a rough 'these truly matter, these can wait' is plenty. It's the difference between a system built around your real needs and one built around a guess.

> **✔ When unsure, ask what you'd regret losing**
> If you can't decide whether something is a must, ask: 'In a two-day outage, would I truly regret not having this?' The answer usually sorts it instantly.

How your list shapes the whole system

This is why the list matters so much: nearly every other decision flows from it.

A short essentials list points toward a smaller generator and often a sub-panel switch. A longer list, or a wish for whole-home coverage, points toward a bigger system, or a managed one that lets big loads take turns. Your list even shapes the fuel and the cost. It really is the foundation everything is built on.

Our guides on sizing, on whole-home versus managed, and on where the switch sits all start from this same list. Build it well, and those decisions get much easier — for you and for your electrician.

> **✔ One good list, many easy decisions**
> Time spent on your must-run list pays off everywhere downstream. It's the opposite of wasted effort — it's the effort that makes everything else simple.

Thinking a little ahead

Your list should serve not just today's home, but the one you'll have in a few years.

If you're planning an addition, thinking about switching to electric heat, adding a hot tub, or expect a health need that would put a device on the essentials list, mention it now. It's far easier and cheaper to size a system with tomorrow in mind than to expand it later.

You don't have to predict the future perfectly — just flag the big, likely changes. A good electrician will build in sensible room where it makes sense, so your system grows with you rather than against you.

> **★ Plan for the home you'll have**
> Tell me about any big plans and I'll help make sure your list — and your system — accounts for them. Planning ahead once beats redoing it later. Call (330) 200-8042.

What if you just want it all?

If you're leaning toward whole-home coverage, does the list still matter? Yes — but a little differently.

With whole-home backup, you're not choosing a handful of circuits; you're backing up everything. But your list still guides sizing (so the generator can carry your real peak use) and helps you weigh whether whole-home is truly worth it over a managed system that would cover your actual needs for less.

So even the 'I want everything' homeowner benefits from the walk through the house. It's how you find out whether 'everything' is really necessary, or whether your genuine must-haves would leave you just as comfortable.

> **✔ The list is a reality check**
> Sometimes the list reveals that your true needs are more modest than you feared — and that a smaller, cheaper system would serve you beautifully. That's a happy discovery worth making.

Turning the list into wired circuits

Once your list is set, a licensed electrician turns it into reality — and that part is firmly theirs.

The electrician takes your chosen circuits and wires them to the transfer switch (or gathers them into a sub-panel), sizes the system to carry them, and pulls a permit so an inspector confirms it's done to code. Your list is the blueprint; their licensed work is the building. Our install-and-permit guide covers the process.

> **! You plan; the pro wires**
> Choosing the circuits is your job and a genuinely important one. Wiring them is never a do-it-yourself task — it's licensed, permitted work, for your safety and the utility crews'.

Safety, briefly

Building a list is safe kitchen-table work — but the system it leads to carries the usual truths.

! The generator still makes carbon monoxide

A standby generator burns fuel, so its exhaust still contains carbon monoxide — an invisible, odorless gas that is dangerous to breathe. Yours lives permanently outdoors, and your installer sets it the manufacturer's required distance from windows, doors, and vents so the exhaust drifts safely away from the house. You never have to place it yourself, but do keep that area clear, never box the unit in or enclose it to quiet it down, and keep tested carbon-monoxide alarms inside the house all the same.

And once your circuits are wired to the switch, remember the whole system is licensed, permitted work that keeps your generator's power off the utility lines. Any change to which circuits are backed up is a job for your electrician — a fine thing to revisit as your needs change, but never a do-it-yourself rewire.

! Don't overload your own plan

It's tempting to pile everything onto the list, but a system asked to run more than it's sized for isn't safe or reliable. Rank honestly, and let the pros size for what you truly need.

A simple must-run worksheet

Use this as you walk your home. Check what applies, then rank each 'must' or 'want.'

- ❑ Refrigerator and freezer (food safety).
- ❑ Furnace or boiler (heat — and frozen-pipe protection).
- ❑ Well pump (water) and/or sump pump (dry basement).
- ❑ A few lights, outlets, phones, and the internet.
- ❑ Any medical device someone depends on.
- ❑ Comfort extras: air conditioning, microwave, television.
- ❑ Big loads: range, electric water heater, dryer (often 'want').

> **✔ Keep the worksheet with your home papers**
> Once you've filled this out, tuck it in with your other home documents and bring it to your electrician. It's the single most useful thing you can hand them.

Common mistakes making the list

A few avoidable slip-ups come up again and again.

- **Forgetting the sump pump,** then flooding a basement while the fridge hums happily.
- **Leaving off medical devices** or the internet — the very things you'd most need in an emergency.
- **Piling on everything** without ranking, so the system gets oversized and overpriced.
- **Picturing a mild outage,** not the January cold or August heat when it really counts.
- **Not thinking ahead,** then outgrowing the system when life changes.

> **! The list is where regret is prevented**
> Almost every 'I wish my backup did X' starts with X being left off the list. A careful walk through the house prevents most of them.

Questions to ask about your circuits

These help you turn a good list into a good system.

Q: Can my system back up everything on my must list at once?
Confirm your essentials can all run together, especially heat and water. If not, revisit the size or consider managed.

Q: Should any of these be managed to let me use a smaller generator?
Ask whether load management could cover your list with a smaller, cheaper generator by having big loads take turns.

Q: Can I add circuits later if my needs change?
Life changes — ask whether the system leaves room to add a circuit or two down the road.

Q: Is my sump pump and well pump definitely included?
Double-check the water loads specifically — they're the ones most often missed and the most painful to lose.

> **✔ There's no silly question**
> A good electrician welcomes your list and your questions about it. It's your home and your comfort on the line — speak up for what matters.

Common Questions

The questions I hear most about choosing what to back up, answered plainly.

Q: How do I decide which circuits to back up?
Walk your home and ask what you'd truly want running in a two-day outage in the worst season. Sort it into 'must run' and 'nice to have.' That list becomes the circuits your electrician wires to the switch.

Q: What do people most often forget?
The sump pump, first of all — a dead one floods a basement. Also medical devices, the internet, and, for well homes, the well pump itself.

Q: Do I have to back up my whole home?
No — many homes back up a focused set of essentials, which lets a smaller, cheaper system do the job. Whole-home is a choice, not a requirement.

Q: Will my gas furnace work without backing it up?
No — even a gas furnace needs electricity for its blower and controls. Put it on the list to keep the house warm and the pipes from freezing.

Q: Can I change my mind later?
Often, yes — adding a circuit later is usually possible, as licensed work by your electrician. Better still, plan a little ahead so the room is already there.

> **★ Want help building your list?**
> Call or text me at (330) 200-8042 and we'll walk through your home together, on the phone or in person, and build a list that truly fits you.

What I do to help

Building the must-run list is one of my very favorite things to help with, because it's where good backup power begins.

- **What I help with:** walking your home with you, catching the loads people forget, ranking must vs. want, and handing a clear list to your electrician.
- **What only a licensed electrician does:** wire your chosen circuits, size the system, and pull the permit.
- **What I never do:** the wiring myself — I help you plan; the pro builds it.

> **★ Start with the list, start with me**
> Before you talk to anyone about equipment, let's get your list right. It's the foundation of everything else. Reach me at (330) 200-8042.

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.

> **★ Bill's Home Tech — real help, close to home**
> Call or text me at (330) 200-8042, or visit BillsHomeTech.com. Serving Atwater and all of Portage County. 30+ years of patient, plain-English tech help — and if you're ever not 100% happy with a visit, I'll make it right or refund it. That's a promise. — Bill

The Three Levels of a Must-Run List

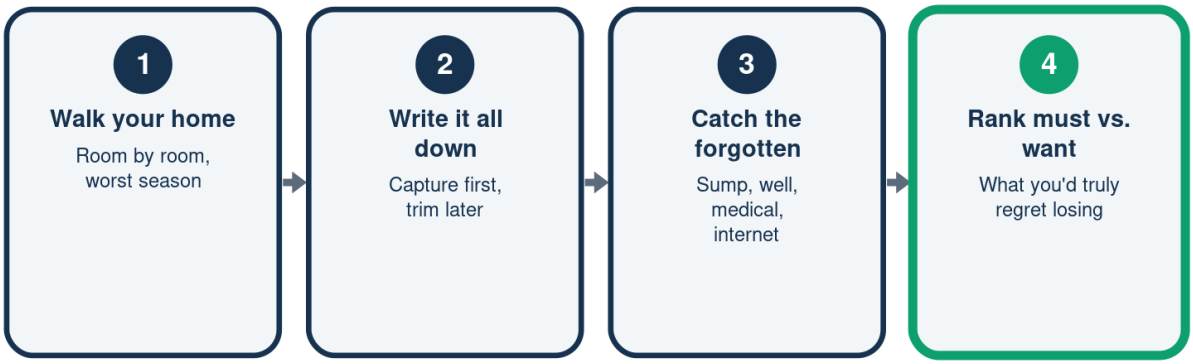
Where your list lands points to the system you need

	What it covers	Roughly what it takes
Essentials	Fridge, heat, water,	A smaller system
Add comfort	AC, microwave, TV	A mid-sized or managed
Most of the house	Range, dryer, all	A large or managed
The water rule	Well & sump pumps	Never leave off

Rank honestly -- safety and health lead, comfort follows.

Building Your Must-Run List

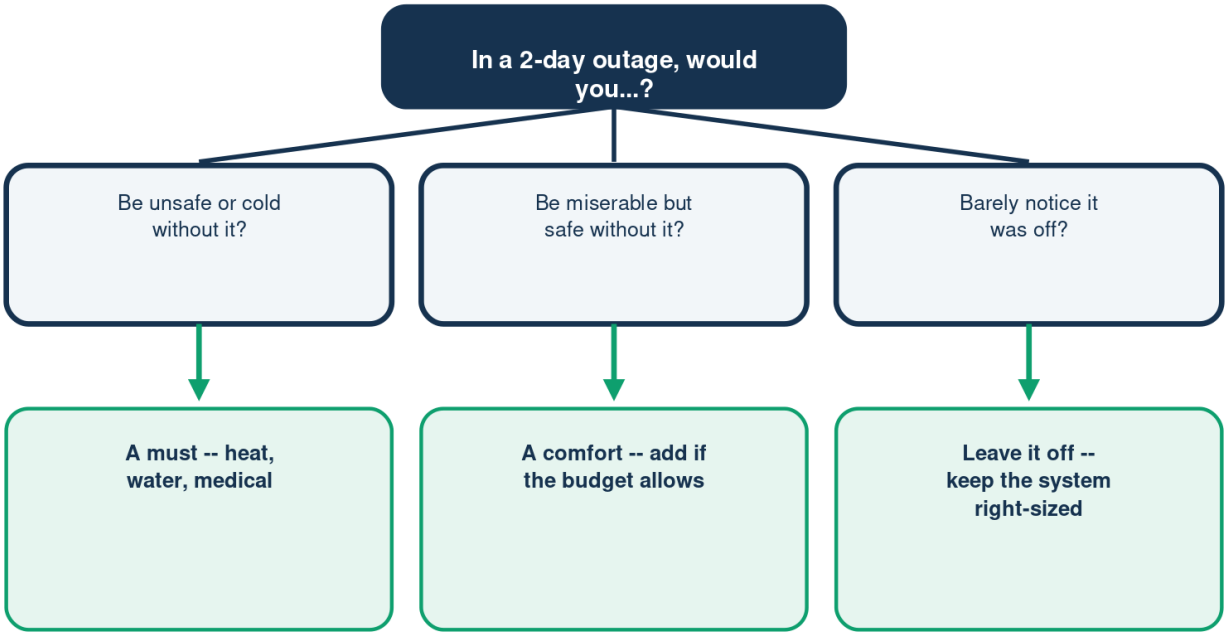
A walk, a list, a ranking



This list becomes the circuits your electrician wires in.

Does It Belong on the List?

A quick test for each item



Water -- well pump and sump pump -- almost always belongs.

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

The Loads People Forget

Don't let these slip off your list

	Load	Why it matters
Sump pump	A dry basement	In a rainy outage
Well pump	Water itself	For well homes
Medical devices	Health & safety	Someone depends on it
Internet & phone	Calling for help	Staying informed

The sump pump is the classic miss -- put it on the list.

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A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— Bill

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