



An Extended Guide · No. 1654

Generator Extension Cords Done Right

The simple, no-wiring
way — done safely

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! Read this first — carbon monoxide is the real danger

A running generator's exhaust contains carbon monoxide — an invisible, odorless gas that can kill in minutes. Never run a generator indoors, in a garage, in a shed, or on a porch, not even with the door open and a fan going. Run it outside only, well away from the house — the safety agencies say at least 20 feet — with the exhaust pointed away from every window, door, and vent. Put battery-backup carbon-monoxide alarms on each floor and outside the bedrooms. If an alarm sounds, or anyone feels dizzy, sick, or sleepy, get everyone into fresh air first and ask questions later. A proper long outdoor cord lets you keep the generator a full 20-plus feet away — never shorten that distance just to fit a short cord.

Extension cords: the simple, no-wiring way

If the idea of transfer switches and panels feels like a lot, here's good news: the simplest way to use a generator needs no wiring at all. You run outdoor-rated extension cords from the generator to the things you want to keep going. That's it.

I'm Bill. For 30-plus years I've helped folks around Portage County with the gear in their homes, and for a great many of them, cords are all they ever need — a fridge, some lights, a way to charge phones and run a fan or a small heater. No electrician, no permit, no fuss.

But 'simple' isn't the same as 'anything goes.' There's a right way to do this that keeps you safe from fire and shock, and a few wrong ways that cause real trouble. This guide walks you through doing it right, in plain language, one habit at a time.

★ This is a great place to start

The cord method is where I steer a lot of first-time folks, because it's safe, cheap, and easy to learn. If you'd like a hand picking the right cords and setting it up at your home, that's exactly my kind of visit. Call or text me at (330) 200-8042.

The 60-second version

If you read nothing else in this guide, read this page.

- ❑ Extension cords let you power individual appliances directly — the simplest, safest no-wiring option, and no electrician needed.
- ❑ Cords can't reach hardwired 240-volt loads like a well pump, furnace, water heater, or central AC. Those need a panel hookup.
- ❑ Use outdoor-rated cords only — look for a jacket marked SJTW or STW, such as '12/3 SJTW.'
- ❑ Match the gauge to both the load and the length — heavier wire (a lower gauge number) for more watts and for longer runs.
- ❑ Fully uncoil every cord before use. A coiled cord traps heat and can melt or catch fire.
- ❑ Keep connections up off wet ground, inspect cords for damage, and never pinch a cord under a rug, door, or window.

! This page is worth reading twice

Everything else in this guide expands on these six lines. If you build just these habits, you'll be using cords more safely than most folks ever do.

How the extension-cord method works

Let's start with the whole idea in one breath, because it really is refreshingly simple.

You place the generator safely outdoors and well away from the house, then run outdoor-rated extension cords from its outlets to the individual things you want to keep running — the refrigerator, a lamp or two, a phone charger, a fan or a small space heater. Each appliance plugs into a cord; the cord plugs into the generator. Nothing is wired into your house at all.

That's exactly why it's the simplest and safest do-it-yourself path. Because nothing touches your home's electrical panel, there's no wiring, no permit, and no electrician needed — and none of the panel hazards that come with connecting a generator to your home's circuits the wrong way.

For a lot of households, this is the whole plan, and a perfectly good one. The rest of this guide is simply about choosing the right cords and using them safely, so this simple method stays safe.

✓ Simple, and genuinely safe when done right

Don't let anyone talk you into thinking cords are second-rate. For keeping the essentials running in an outage, a few good outdoor cords, used properly, are a sound and sensible choice.

What cords can and can't reach

The cord method has one real limit, and it's important to know it up front so you're never caught expecting more than cords can give.

Cords are wonderful for things you plug in — anything with a regular plug on the end. What they cannot do is power the big, hardwired loads that are permanently connected to your home's wiring, with no plug to reach: a well pump, a furnace, a water heater, or central air conditioning. Those are typically 240-volt loads wired straight into your panel.

To run those, you need a panel hookup done by a licensed electrician — either a transfer switch or an interlock. Our transfer-switch-vs-interlock guide walks through both, and our inlet-box-and-generator-cord guide covers the single heavy cord that feeds them. This guide stays in its lane: the plug-in things you can safely handle yourself.

! Cords never reach a hardwired 240-volt load

If your must-have list includes the well pump, the furnace, or central AC, cords alone won't get you there — and no adapter safely bridges that gap. That's your signal to look at a panel hookup, not a longer cord.

Outdoor-rated cords only — look for the jacket marking

This is the first and most important cord choice: the cord has to be built for the outdoors, because that's where it lives and works.

An indoor cord isn't made to handle rain, wet ground, sun, and temperature swings, and using one outdoors is asking for trouble. An outdoor-rated cord has a tougher jacket designed for exactly those conditions — it's the difference between a cord that lasts and one that cracks and becomes a hazard.

You can tell by the letters printed right on the jacket. Look for SJTW or STW — those markings mean the cord is rated for outdoor use. You'll often see them together with the gauge, in a stamp like '12/3 SJTW.' If you can't find an outdoor rating on the jacket, don't use it for the generator.

- Look for SJTW or STW printed on the cord's jacket — that's the outdoor rating.
- The full stamp often reads something like '12/3 SJTW,' combining the gauge and the rating.
- An indoor-only cord outdoors can crack, overheat, or let water in — never use one for the generator.
- When in doubt, buy a cord clearly labeled for outdoor generator use.

Reading the nameplate and matching the gauge

Here's the part that sounds technical but really isn't: the cord has to be heavy enough for the job. Let me teach you the idea, not a number to memorize.

Gauge is just the thickness of the wire inside the cord. The confusing bit is that a lower number means a heavier, thicker wire — so a 10-gauge cord is heavier than a 12-gauge, which is heavier than a 14-gauge. Heavier wire carries more power safely and loses less over a distance.

How heavy you need depends on the appliance. Rather than guess, read the nameplate — the little label on the appliance or its paperwork that lists what it draws. I won't hand you made-up wattage numbers, because the honest answer is on that label, and matching the cord to it is the whole point.

✓ Lower number, heavier cord

If you remember one thing about gauge, make it this: lower number means heavier wire. When you're unsure between two cords, the heavier one (the lower gauge number) is almost always the safer choice.

Long runs, voltage drop, and going heavier

There's a second half to choosing a cord, and folks miss it constantly: length matters just as much as the load.

The longer a cord, the more the electricity fades on its way to the appliance — that fading is called voltage drop. Too much of it and your appliance gets less than it needs, which can make motors run hot and shortens their life. The fix is simple: for a longer run, go heavier — a lower gauge number.

So you're really matching the cord to two things at once: the load and the length. A short cord to a small lamp can be light; a long cord to a bigger appliance needs to be heavier. As a rough sense of scale, a run of around a hundred feet, or a big load, often calls for something in the neighborhood of 10-gauge. Treat that as a concept, not a rule — read the nameplate and, when unsure, ask.

✓ Both the load and the length

Keep both in mind together. When the run is long, or the load is big, or especially both, step up to a heavier cord. Going too heavy never hurts; going too light does.

Fully uncoil every cord before you use it

This is the safety habit people skip most often, and it's one of the most important on the list — so it gets its own page.

A cord carrying power gives off a little heat, which is normal. But if the cord is still coiled up — looped in a neat bundle the way it's stored — that heat has nowhere to go. It builds up inside the coil, trapped, and can rise high enough to melt the jacket or even start a fire. A cord that would be perfectly safe stretched out can become dangerous left in a coil.

So before you plug anything in, lay the cord out fully — uncoiled, stretched along its path, not left bundled by the generator or piled in a heap. It takes a moment, and it lets the cord shed its heat the way it's meant to.

! A coiled cord traps heat — always uncoil first

This one is worth saying plainly, because it's easy to overlook and it genuinely starts fires. Never run power through a coiled cord. Uncoil it fully, every single time, before you connect anything.

Keep plug connections up off wet ground

The places where cords plug together are where water causes the most trouble, so give those spots a little extra care.

Where a cord meets the generator, and where an appliance cord meets an extension cord, is exactly where you don't want water. Keep those connections up off wet ground — resting on a dry block, a brick, or anything that lifts them out of a puddle — rather than lying in the grass or on wet pavement.

Where they're sold, use in-use covers — little weatherproof covers that shield an outdoor connection while it's plugged in — and twist-lock connections, which lock together so they can't shake loose. Both help keep water out and keep the connection solid, especially in the weather where a generator earns its keep.

- Lift plug connections off wet ground — a dry block or brick works fine.
- Use in-use covers where available to shield connections from rain.
- Twist-lock connections lock together and resist shaking loose.
- Keep the joins where you can see them, not buried under leaves or snow.

Inspect every cord before you use it

Cords take a beating — dragged over concrete, shut in doors, chewed by the occasional critter — so give each one a quick look before it carries power.

Run your eyes and hands along the whole length, looking for cuts, cracks, or worn spots in the jacket, and check the plugs at both ends. A damaged jacket can expose the wire inside to weather and to touch, which is both a shock and a fire risk. If a cord is cut, cracked, or the plug is loose or damaged, retire it — don't patch it with tape and hope.

While it's running, notice temperature too. A plug or connection that feels hot to the touch is telling you something's wrong — often a cord that's too light for the load, or a poor connection. Unplug, let it cool, and sort out the cause before you use it again.

! A hot plug is a warning, not a quirk

Cords and plugs should stay cool or barely warm. If one gets hot, stop and find out why — usually it means the cord is too light for what it's carrying, or a connection has gone bad. Don't just keep going.

Never pinch a cord under a rug, door, or window

It's tempting to run a cord in through a door or window, or tuck it under a rug so no one trips — but pinching a cord does real harm in two different ways.

First, squeezing a cord in a door, a window, or under a heavy rug damages it. The pressure crushes the jacket and the wire over time, creating exactly the cuts and cracks you just learned to look for — a shock and fire risk hiding where you can't see it.

Second, running a cord through a cracked window or door works against the whole reason the generator is outside. A door or window propped open around a cord lets in the very weather — and can leave a path for exhaust — that keeping the generator well away was meant to prevent. Feed cords through a proper opening, or use a panel hookup, rather than pinching a door shut on them.

! Don't crush a cord, and don't crack a door on it

A pinched cord is damaged goods, and a door held open around one undoes your careful placement. Route cords so nothing crushes them and nothing has to be propped open onto the exhaust path.

Two kinds of homes, two sets of needs

Whether cords are the whole answer, or just part of it, depends a lot on what you need to run — which often comes down to where you live.

If you live in town or the suburbs

In town, folks often keep just a few things going — the fridge, some lamps, phones, a fan or small heater — and for that, a few good outdoor cords are frequently the entire plan.

- A short list of plug-in essentials is exactly what the cord method does best — no electrician needed.
- Choose cords long enough to keep the generator a full 20-plus feet out and still reach comfortably.
- On a damp patio or driveway, keep connections up off the wet and use in-use covers.
- If gas heat runs on a plug-in blower you can reach, cords may cover it; a hardwired furnace won't.

If you are out in the country on a well

Out in the country, the well pump is almost always a 240-volt load wired into the panel — and cords simply can't run it, so rural homes often need a panel hookup on top of any cords.

- No water without the well pump, and cords can't reach it — that's the classic reason rural homes step up to a panel hookup.
- See our transfer-switch-vs-interlock guide for running the well pump, furnace, and other hardwired loads.
- Longer, colder outages make heavier, weather-tough cords and dry connections matter even more.
- You may still use cords for the plug-in extras alongside a panel hookup for the big loads — the two work together.

★ Not sure if cords are enough for you?

Tell me what you'd want to keep running and I'll help you sort out what cords can handle and what needs a panel hookup — and line up a licensed electrician if it does. Call (330) 200-8042.

Let the cord length keep your distance

Here's where cords and safe placement meet, and it's one of the most important points in this guide: the cord serves the distance, never the other way around.

The generator has to sit outdoors and at least 20 feet from the house, with its exhaust pointed away — that's the carbon monoxide rule from our 20-foot-rule guide, and it doesn't bend. The right-length cord is simply what lets you honor that distance comfortably: long enough to reach from a generator sitting a full 20-plus feet out to the appliance inside, without being stretched tight.

What you must never do is drag the generator closer to the house to make a short cord reach. That's backwards, and it's dangerous. If a cord won't reach, get a longer outdoor-rated cord of the right gauge — never shorten the safe distance to fit the wire you happen to have.

! The distance is the rule; the cord bends to it

Say it to yourself when you set up: the 20-plus feet is fixed, and the cord is what adjusts. A longer cord is cheap and easy. Moving the generator closer to the house can cost a life.

Don't daisy-chain cheap indoor cords

When one cord won't reach, the wrong instinct is to plug a second into the first, and a third into that. Let's head that off.

Chaining cords together — 'daisy-chaining' — especially with light indoor cords, is a common and risky shortcut. Every connection is one more place for resistance, heat, and water to cause trouble, and each added length means more voltage drop. Thin indoor cords strung together to span a long distance are exactly the recipe for an overheated, sagging, unsafe run.

The right answer is a single outdoor-rated cord of the correct length and gauge for the whole run. One good cord that reaches all the way is safer than three cheap ones taped together — every time. If you find yourself reaching for a second cord, that's your cue to buy the right one instead.

! One right cord beats three wrong ones

Don't solve a reach problem by chaining light indoor cords. Buy a single outdoor-rated cord long enough and heavy enough for the whole run. It's cheaper than a fire and far safer.

Your extension-cord checklist

A few minutes with this list turns the whole guide into a simple set of habits you can run through every time.

- ☐ Every cord is outdoor-rated — SJTW or STW on the jacket — and undamaged, with no cuts or cracks.
- ☐ The gauge matches the load and the length — heavier (lower number) for bigger loads and longer runs.
- ☐ Every cord is fully uncoiled before it carries any power.
- ☐ Connections are up off wet ground, with in-use covers where you have them.
- ☐ Cords are long enough to keep the generator a full 20-plus feet out, and none are pinched or daisy-chained.

✓ Keep this list with your cords

Tuck a copy of this page in with your stored cords, so the safe habits are right there when you set up — not something to remember in the dark and rain.

Myths people believe — and the truth

A few mistaken beliefs about generator cords come up again and again. Here's the honest version of each.

Myth	Fact
'Any heavy-duty cord will do outside.'	It has to be outdoor-rated — look for SJTW or STW on the jacket.
'A thinner cord is fine if I just need the reach.'	Length adds voltage drop. Longer runs need heavier wire, a lower gauge number.
'It's fine to leave the cord coiled.'	A coiled cord traps heat and can melt or catch fire. Always uncoil fully.
'I'll chain a few cords to get there.'	Daisy-chaining light cords overheats and sags. Use one right cord for the whole run.
'A shorter cord means I can set it up faster.'	Never move the generator closer to fit a short cord. Get a longer cord instead.

! A belief doesn't have to be true to feel true

Every myth above sounds reasonable at first, which is exactly why they persist. When something you've heard doesn't match this guide, trust the rule, not the rumor.

Questions worth asking

A few plain questions that clear up most of the confusion I hear about generator cords.

Q: How do I know what gauge cord an appliance needs?

Read the appliance's nameplate for what it draws, then match a cord heavy enough for that load and the length of the run. When in doubt, go heavier — a lower gauge number is the safer choice.

Q: How long can a generator cord be?

Long enough to keep the generator a full 20-plus feet from the house, and no need to stretch it tight. Just remember longer runs need heavier wire to make up for voltage drop.

Q: Can I run the cord in through a window?

Avoid pinching a cord in a window or door — it damages the cord and props open the very gap your placement was meant to keep closed. Use a proper opening or a panel hookup instead.

Q: Can cords run my well pump or furnace?

No — those are usually hardwired 240-volt loads with no plug to reach. They need a panel hookup by a licensed electrician; our transfer-switch-vs-interlock guide covers that.

★ There's no silly question here

This is a topic where a quick question saves a lot of trouble. Reach me at (330) 200-8042 any time you'd like to talk through your cords and setup.

Common Questions

The questions I hear most from folks working through this guide, answered plainly.

Q: What does SJTW mean on a cord?

It's a jacket marking that means the cord is rated for outdoor use. You'll often see it with the gauge, like '12/3 SJTW.' If you can't find an outdoor rating on the jacket, don't use the cord for the generator.

Q: Why does a lower gauge number mean a heavier cord?

That's just how gauge works — the number runs backwards. A 10-gauge wire is thicker and heavier than a 12-gauge, which is heavier than a 14-gauge. Heavier wire carries more power safely and loses less over distance.

Q: Is it really that dangerous to leave a cord coiled?

Yes. A cord under load gives off heat, and a coil traps it with nowhere to go, hot enough to melt the jacket or start a fire. Always uncoil a cord fully before it carries power.

Q: Do I need an electrician for the cord method?

No — that's the beauty of it. Powering plug-in appliances with outdoor-rated cords needs no wiring and no electrician. You only need a pro when you want to feed hardwired 240-volt loads through your panel.

! Read it again if it's been a while

This guide is worth revisiting any time you add appliances to your list, buy new cords, or set up at a new home.

When cords aren't enough — what comes next

Cords are the right starting point for most folks, but there's a clear moment when it's time to step up — and it's good to recognize it.

If your must-have list has grown to include hardwired 240-volt loads — the well pump, the furnace, central AC — or you simply want to power several household circuits at once without running a tangle of cords, that's the sign you've reached the edge of the cord method. That isn't a failure; it's just a different tool for a bigger job.

The next step is a panel hookup by a licensed electrician. Our transfer-switch-vs-interlock guide compares the two panel options, and our inlet-box-and-generator-cord guide covers the single heavy cord that connects the generator to the house. You may well keep using ordinary cords for the plug-in extras alongside it — the two approaches work together nicely.

★ I'll help you know when it's time

If you're not sure whether cords still cover you or it's time for a panel hookup, that's an easy thing to sort out together — and I'll line up a licensed electrician if you need one. Call or text me at (330) 200-8042.

Bringing it all together

The whole guide comes down to a few plain habits: outdoor-rated cords, matched to load and length, fully uncoiled, kept dry and undamaged, and never pinched or chained.

Cords are the simplest, safest do-it-yourself way to keep your plug-in essentials running, with no wiring and no electrician. Their one limit is the hardwired 240-volt loads — for those, our transfer-switch-vs-interlock guide and our inlet-box-and-generator-cord guide take over.

And through all of it, the cord serves the safety rule, never the reverse: a proper long cord is what lets the generator sit a full 20-plus feet out with its exhaust pointed away, just as our 20-foot-rule guide requires. Never shorten that distance to fit the cord.

★ Let's get your cords right together

On a visit I'll help you pick the right outdoor cords for what you want to run, set them up safely, and figure out whether you'll ever need a panel hookup. Call or text me at (330) 200-8042.

If you remember only one thing

Out of everything in this guide, one idea ties it all together.

Use the right cord — outdoor-rated, heavy enough for the load and the length, fully uncoiled — and let its length keep the generator a full 20-plus feet from the house. Never drag the generator closer to fit a short cord. Get a longer cord instead, every time.

! Say it back to yourself

Outdoor-rated. Heavy enough. Uncoiled fully. And long enough to keep the safe distance — because the distance is the rule, and the cord is what bends to it.

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 using generator extension cords safely 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

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Pick the Right Cord

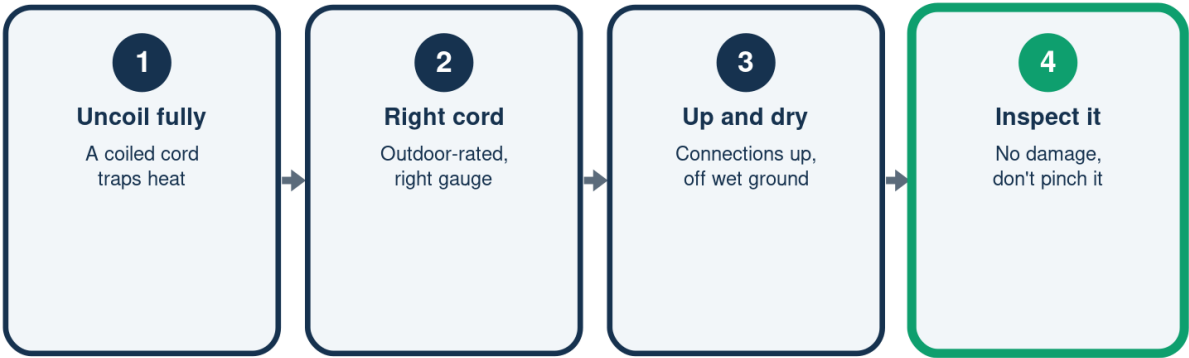
Four things to check before you plug in

	Look for	Why
The jacket	SJTW or STW	Rated for weather
The gauge	Lower = heavier	Handles long runs
The plugs	In-use covers	Keep water out
Condition	No cuts or cracks	Safe to use

Outdoor-rated, heavy enough, and undamaged -- every cord, every time.

Using Cords Safely

Four habits, in order, every time



A coiled cord can catch fire -- always uncoil before you plug in.

Gauge, Length, and Load

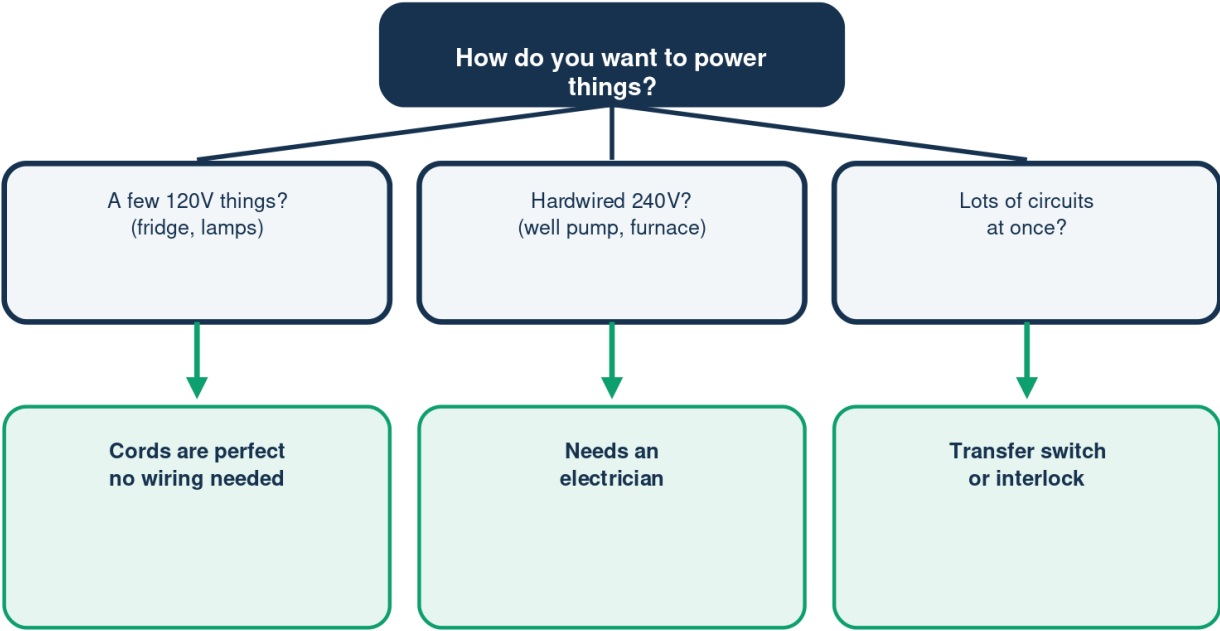
When to reach for a heavier cord

	If the run is...	Go heavier because
Long run	Far from the unit	Voltage drops off
Big load	A heavy draw	Thin wire heats up
Long and big	Both at once	Losses stack up
In any doubt	Unsure of load	Heavier is safer

Read the appliance nameplate for the load -- never guess a wattage.

Cords or a Panel Hookup?

Match the method to what you need to run



Cords can't reach hardwired 240V loads -- those need a panel hookup by a licensed electrician.

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



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A Note From Bill

A quick note from Bill.

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— *Bill*



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