FREE HOMEOWNER GUIDE

Panel upgrade vs service upgrade: what's the difference?

They sound the same. They are not.

If your breakers trip, your lights flicker, or you are adding a hot tub, EV charger, or heat pump, you will hear both terms thrown around: panel upgrade and service upgrade. Knowing the difference saves you money, because you do not want to pay for a full service upgrade if a panel swap solves it, and you do not want a panel swap that leaves the real bottleneck in place.

A panel upgrade replaces the breaker box

A panel upgrade swaps out the breaker box inside your home. That covers replacing an outdated or unsafe panel, like a Federal Pacific or Zinsco, increasing breaker capacity, or making room for new circuits during a remodel.

When it is enough: if the electrical service feeding your home from the utility is already sized correctly, a panel-only upgrade may be all you need.

A service upgrade replaces the utility connection too

A service upgrade includes everything a panel upgrade does, plus the equipment that ties your home to the utility: the meter and meter base, the service mast (the pipe up your roofline), the heavy service-entrance conductors, and the bonding and grounding. Because it ties into the utility lines, it needs coordination with PGE or Pacific Power, always requires a permit and inspection, and your power comes off during the work.

When it is required: moving from 100-amp to 200-amp service or larger, or electrifying the whole house, typically calls for a service upgrade, not just a new panel.

How to tell which one you need

- ☐ Adding a small load like a hot tub or AC: a panel upgrade may be enough
- ☐ Major remodel or whole-home electrification: a service upgrade is likely
- ☐ Unsafe or obsolete panel brand, but properly sized service: panel replacement only
- ☐ Breakers still trip after a panel swap: the service itself may be the bottleneck

Permits, clearances, and time

Both jobs are permitted and inspected in Oregon, with code rules on panel clearances, grounding, and breaker labeling. A panel upgrade is often a one-day job. A service upgrade usually runs one to three days once you factor in utility and inspection scheduling. The only way to know for sure which your home needs is a load calculation by a licensed electrician, and we do that for you and recommend the most cost-effective route. For the numbers, see our Portland panel upgrade cost guide, where most upgrades land between $2,500 and $7,500.

Frequently asked questions

What is the difference between a panel upgrade and a service upgrade?

A panel upgrade replaces the breaker box inside your home. A service upgrade replaces that plus the utility-side equipment: the meter base, service mast, service-entrance conductors, and grounding. A service upgrade ties into the utility lines, so it needs coordination with PGE or Pacific Power and always involves a permit and inspection.

Which one do I need?

It depends on whether your existing service is sized for the load you want. Small additions may only need a panel upgrade. Moving to 200-amp service, electrifying your home, or fixing breakers that still trip after a panel swap usually points to a full service upgrade. A load calculation by a licensed electrician settles it.

Do both require a permit in Oregon?

Yes. Both panel upgrades and service upgrades require an electrical permit and inspection in Oregon. A service upgrade also involves utility coordination for the disconnect and reconnect. We pull the permit, coordinate the utility, and schedule the inspection as part of the job.

How long does each take?

A panel upgrade is often completed in one day. A service upgrade typically takes one to three days once utility and inspection scheduling are factored in. We work with the Oregon utilities to keep downtime short and keep you posted throughout.

Sources

1. Residential Electrical Permits, City of Portland Permitting & Development. https://www.portland.gov/ppd/residential-permitting/residential-electrical-permits
2. Troubleshooting Home Power Problems, Portland General Electric. https://portlandgeneral.com/outages-safety/why-is-my-power-out/home-faqs

> **Need a licensed electrician in the Portland area?**
> Call Smiley Electric at (503) 484-7556 (Mon–Sat, 7am–5pm) or visit smileyelectric.net/contact. For sparks, smoke, a burning smell or a hot panel, turn off the power if it is safe and call right away.

Reviewed by Joshua Smiley, owner & master electrician, Smiley Electric. Last reviewed November 13, 2026. Online version: smileyelectric.net/help/panel-upgrade-vs-service-upgrade/. General information, not a substitute for an on-site inspection.
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