

Close the Utility Workforce Gap with Intelligent Payments & Hands-On Support





The Utility's Defining Moment Is Under Pressure

A heat wave hits on a Friday. A customer's service was shut off that afternoon for a past-due balance; she pays first thing Saturday and calls to find out when her power comes back on. But the rep who knew the disconnect and reconnect workflow best retired last month and the two people now covering the work of three are already deep in their own queues.

So, she waits on hold, wondering whether her service provider will reach her before the afternoon heat does.

This poor customer experience isn't staff's fault. It's the result of workloads that keep growing while utility teams shrink — a gap that's driving up call volumes, arrears, and dissatisfaction for electric, gas, and water providers of every size.



76%

of energy and utility employers report a talent and skills gap within their existing workforce.¹



2.4

workers are nearing retirement for every worker under 25 entering the energy sector.²



25%+

of the utility workforce is already over age 55, well above the national average.³



The Workforce Gap Is Already Here

The people who run utility billing and customer operations are retiring faster than new ones arrive, and the pipeline behind them is thin.

Every day in the U.S., about 10,000 people turn 65, and utilities are one of many industries feeling that impact. The industry even has a name for it: the “great crew change.”⁶ Meanwhile, billing questions, arrears, and disconnect cycles keep climbing. You can’t hire your way out of this structural gap, and waiting for the labor market to turn only lets it widen.



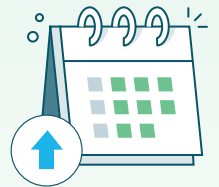
~1-in-3

water sector workers will be eligible to retire within the next ten years.⁴



750,000+

new workers may be needed across the power industry by 2030.⁵



¹ ManpowerGroup Talent Shortage survey (2024), via the Center for Energy Workforce Development, “Energy Workforce Fast Facts.”

² International Energy Agency, World Energy Employment 2025, as reported by POWER Magazine, January 2026.

³ U.S. Bureau of Labor Statistics data, via Lucasys, “Navigating the Age Wave: The Maturing Workforce in the Utility Industry.”

⁴ U.S. Environmental Protection Agency, Water Sector Workforce, via Lucasys, “Navigating the Age Wave.”

⁵ Goldman Sachs Research, as reported by POWER Magazine, “Bridging the Gap,” January 2026.

⁶ Heidrick & Struggles, “The Next Energy Crisis? Talent” (the “great crew change”); “10,000 turn 65 daily” per AARP.

How the Workforce Gap Impacts Utilities

Utility billing questions are often nuanced. The answer depends on the rate structure, the meter read, the account history, and rules that shift with every rate case, budget-billing plan, and assistance program. When a seasoned CSR or billing analyst retires, they take that knowledge with them but the questions that require that knowledge never stop. Instead, they land on a smaller, possibly less experienced team and the result shows up in some of your most complex and critical workflows.

1. **The disconnect cycle dictates cost-to-serve.**

When reminders, payment posting, and “did my payment go through” answers depend on a shrinking team, customers slip into arrears, disconnects and reconnects pile up, and the cost of that cycle lands on both your budget and your field crews.

2. **The bar for payments trust is higher.**

A customer sharing bank or card details expects accuracy and security for sensitive account information. A wrong answer about a balance, a payment arrangement, or whether a payment posted before a disconnect carries real weight.

3. **Compliance is non-negotiable.** PCI and Nacha requirements, state utility commission rules, and jurisdiction-by-jurisdiction assistance and disconnection policies shape what any customer-facing system can say and do. A generic tool retrofitted for utilities after deployment leaves that exposure with you.

4. **Utilities serve everyone.** The customers who tend to drive your call volumes up are often elderly, unbanked, and non-English-speaking folks. Unfortunately, these are the demographics that most self-service payment tools leave behind. To get these calls out of the queue, it's truly important to have user-friendly self-service options for everyone.



Reframing Utility Operations: Grow Capacity, Not Headcount

Stop measuring the operational efficiency by seats filled. Measure it by work resolved.

AI tools can help resolve the routine, repeatable questions that fill your queue, so your staff can focus on the work only people can do; helping the customer who needs a payment plan, the account headed for disconnect that deserves a conversation, or the billing dispute that could trigger an audit.

At its best, AI should fundamentally change how your team spends their day. Employees go from hurriedly keeping up with the queue to answer the same question over and over, to multifaceted work that fosters positive customer relationships and keeps operations running smoothly.



AI doesn't replace your team. It changes what your team spends their day on — and that's the strategic work that keeps your operation afloat.



The Employee Skill Gap

The quieter aspect of the workforce gap is employee comfort and confidence with today's AI tools. Some utility team members may not have used AI much at work or at home, so they don't yet have a feel for what it can do or where to start.

The key is finding an AI-embedded payments platform that partners, instead of one that implements and disappears.

Not Every Tool Closes the Gap

- **A platform that partners, not just software.**
Utilities need a dedicated team that understands utility billing, your CIS, and your goals. You need a team that works alongside yours from day one to co-manage adoption campaigns, review what's working in regular check-ins, and show your people exactly how to put each capability to work. It's just as important to find a payment partner that makes

implementation and use as easy as possible. There should be no "rip and replace." Instead, expertly guided integrations pre-built for the CIS and core systems you already run including Oracle, SAP, Muni-Link, CentralSquare, and more.

- **Embedded in the workflow, not bolted on.**
AI that lives inside the billing and payment workflow (reading real account data, answering the question, and completing the transaction where your customers already are) closes the current experience gap. A chatbot bolted onto a portal, or a connector that asks you to bring your own AI, only adds another tool for a stretched team to manage. Embedded capabilities are easier to access, easier to use, and come with a team of experts to train staff and stay on call for technical questions.

What Do Platforms That Partner Look Like?

When we talk about platforms that partner, what do we mean? True partnership from a vendor should offer a few key services.



Implementation

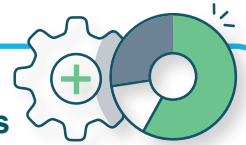
A good implementation should subtract work, not add it. True payments partners should own the majority of the implementation workload, so your team can focus on their day jobs while utility payment specialists map your billing, rate, and CIS workflows.



Technical Support

After go-live, technical support is where a lean team is most exposed. Peak season (summer cooling, winter heating, and storm-driven spikes) is exactly when volume peaks and when a platform can least afford to stumble. InvoiceCloud backs a 99.9% uptime commitment, so the platform stays up on the days that matter most.

When your team does need help, responses should be fast and come from experts. Following go-live, InvoiceCloud customers receive a Customer Success Manager who serves as an internal advocate, strategic partner, and educational resource. Plus, award-winning technical support is at the ready 24/7, with an initial response time of less than one hour.



Digital Adoption Services

Digital adoption services are the hands-on programs a payments partner runs to get customers actually using digital billing and payments, rather than launching a portal and hoping. They typically include an assessment of where adoption stands today, benchmarking against comparable utilities, clear enrollment goals, co-managed campaigns for AutoPay and paperless, tracking of adoption metrics, and regular check-ins to adjust course.

InvoiceCloud's Adoption Growth Services team runs this motion with each customer, and utilities using this approach see a 58% rise in paperless enrollment, with an average 76% increase in digital payment adoption in the first year.⁷



Payer Support

When service queues are more than a utility team can manage, true payment partners become an extension of your staff. InvoiceCloud offers Payer Support services that do exactly that: dedicated billing and payments specialists that are trained on your organization's business and operating rules to provide surge handling, after-hours coverage, and fast, accurate responses.

Close the Workforce Gap Where It Matters Most

Billing and payment volumes aren't stabilizing. Rate structures grow more complex, customer expectations keep rising, and every year another cohort of experienced staff retires.

The cost of waiting shows up in higher call volume, in arrears, in the disconnect and reconnect cycle, and in the frustrated customer who didn't get an answer when it mattered.

Pairing a payments partner with AI-embedded technology built for utilities addresses both sides of the gap: it covers the volume you can't out-hire, and it upskills your team so they can confidently use tools that make their days easier.

The workforce gap isn't going anywhere. In fact, it's only going to widen. Utilities need to address it now to help their teams today.

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What AI-Powered Service Looks Like for Utilities

InvoiceCloud's AI-embedded capabilities are built on 15 years of real billing transaction data across utilities and the other regulated industries we serve, which includes more than \$40 billion in payments every year. It lives inside the end-to-end payment experience your customers already use, not features bolted onto a portal, and not a connector that asks you to bring your own AI.

Here are a few ways we use AI in our workflows to improve utility efficiency and cover the industry's workforce gap:

- **AI Report Generator.** Ask for what you need in plain language and get the report in seconds. This tool is available today and is the winner of the 2026 AI Excellence Award.

- **InvoiceCloud Service Module.** Resolve routine end-to-end billing questions like balance and payment status, "did my payment post before my service was shut off," AutoPay and paperless enrollment, budget-billing questions, and bill explanations. All responses draw on real account data, and when a customer needs a person, your team opens the case with full context, an account summary, and a recommended next action..



What It Looks Like in Practice

It's easy to talk about technology in the abstract, so let's put it in context.

When utility teams are strapped for resources and don't have the budget to hire but are watching queues and workloads grow, how can payment tools actually cover the workforce gap? Here are a few real-life examples.



Service Module: The Front Line

- **The disconnect worry.** A customer calls the morning after a shut-off: "I paid, when does my power come back on?" Service Module checks the actual account, confirms the payment, and explains the reconnect status without landing customers in the growing hold queue.
- **The AutoPay moment.** While answering a one-time payment question, the Service Module sets up AutoPay or a payment arrangement in the same conversation, and AutoPay-enrolled customers are far less likely to slip into arrears.
- **The peak-season surge.** A heat wave hits and call volume spikes. The Service Module absorbs the routine while your team works the accounts that need judgment.
- **The clean handoff.** A billing dispute or complex rate question needs a specialist. The rep gets the full thread and an account summary before they say hello.

AI Report Generator: The Back Office



- **The board scramble.** The finance director needs AutoPay and paperless adoption trends for tomorrow's board or council meeting. Instead of filing a request and waiting days, the team asks in plain language and has the numbers in seconds.
- **The rate-case request.** A regulator or analyst wants a full year of payment activity for a class of accounts. The AI Report Generator pulls it on demand — no ticket, no analyst pulled off their real work.
- **The Monday cut.** An analyst needs last week's payments split by rate class and channel. They describe what they want and get the report right away, instead of exporting raw data and building it by hand.
- **The dip nobody can explain.** Leadership sees a slow collection week and wants to know why. The team asks for a breakdown by region and payment method and has the answer in minutes.

How can payment solutions actually cover the workforce gap?

Award-Winning AI for the Teams Behind Every Transaction



InvoiceCloud is a leading provider of billing and payment solutions for regulated industries, trusted by utilities of every ownership structure and fuel type — electric, gas, water, combo, IOUs, municipalities, and co-ops. Our embedded intelligence approach means AI is built into (not bolted onto) every step of the billing and payments lifecycle, from bill presentment to payment to reconciliation.

To learn more about our approach to AI in billing and payments and how it benefits your utility, schedule some time to talk with our team.

TALK TO OUR TEAM



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