C.U.R.E. UTILITIES

C.U.R.E. Utilities User Guide

A Utilities Systems Performance & Intelligence Platform

Utility Intelligence - from revenue recovery to regulatory resilience

Edition	Version 1.43 - September 2026
Purpose	A practical guide to navigating C.U.R.E. Utilities, interpreting its evidence, completing assessments, and producing decision-ready outputs.
For	Utility staff and invited assessment respondents; Syntegras and CIVAIGENTICS analysts and administrators; Utility executives and reviewers using finalized scorecards and reports

Use the online guide for the newest navigation. Use this edition for training, circulation, and field reference.

Syntegras, LLC and CIVAIGENTICS, LLC

HOW TO USE THIS GUIDE

Contents

Begin with the quick-start path for your role. Use the module reference for page-by-page decisions, then use the assessment, export, administration, and troubleshooting sections as operator references.

A note about scope

Screens and capabilities vary by role and by the evidence available for the selected utility. Pending, Candidate, Not observed, Not applicable, and Not available are intentional states; do not convert them to zero or assume they mean no risk.

PART 1

Quick start by role

Utility user

Use the assigned utility workspace, review source-backed information, and contribute evidence without changing public records.

1. Confirm the utility and engagement in the workspace header. Your assignment determines which records and actions are available.
2. Choose a task on the User Guide home. Read its prerequisites or try a synthetic practice exercise, then open the companion walkthrough.
3. Save the page fields and inspect the selected saved record. Keep instruction review separate from acceptance, publication, implementation and payment.

Investigator, reviewer or city representative

Work within an assigned engagement using the responsibilities set by an administrator.

1. Confirm the utility and engagement in the workspace header. Your assignment determines which records and actions are available.
2. Choose a task on the User Guide home. Read its prerequisites or try a synthetic practice exercise, then open the companion walkthrough.
3. Save the page fields and inspect the selected saved record. Keep instruction review separate from acceptance, publication, implementation and payment.

Administrator

Select the correct utility, preserve provenance, review candidate matches, and publish only supported conclusions.

1. Confirm the utility and engagement in the workspace header. Your assignment determines which records and actions are available.
2. Choose a task on the User Guide home. Read its prerequisites or try a synthetic practice exercise, then open the companion walkthrough.
3. Save the page fields and inspect the selected saved record. Keep instruction review separate from acceptance, publication, implementation and payment.

Sign-in and role boundaries

Utility users sign in with an administrator-issued account and complete email verification when prompted. Their data access is restricted to the assigned utility. Administrators can select utilities and manage evidence and assessments; super administrators additionally control protected administration and audit functions.

Before every action

Confirm the utility name, module, page, source period, and evidence state before importing, scoring, finalizing, or exporting. A correct workflow applied to the wrong utility is still a data error.

PART 2

Evidence, scores, and navigation

Core evidence concepts

Term	Meaning
Public-source context	A record published by a regulator or planning agency. It remains separate from analyst scoring and may be incomplete, delayed, or only a candidate match.
Utility-provided record	A file, response, or operational record supplied by the utility. It must retain its custodian, period, source reference, and any limitation.
Verified identity	A reviewer-confirmed link between the utility and an authoritative identifier, such as an NPDES permit or MS4 authorization. Verification changes attribution, not the source facts.
Evidence grade	The support behind a score: documented artifact, observed demonstration, staff assertion, or public filing. A score and its evidence strength should always be read together.
Evidence coverage	The share of weighted criteria supported well enough to score. It is not the performance score and should not be interpreted as one.
Finalized score	A versioned evidence snapshot approved for the scorecard. It is decision support, not a regulatory certification, engineering guarantee, audit opinion, or promised financial outcome.

Decision-support boundary

A finalized C.U.R.E. score is a versioned evidence snapshot. It is not a regulatory determination, engineering certification, audit opinion, or guaranteed financial outcome.

Shared platform navigation

Destination	Route	Use
Expandable sidebar	Application navigation	Section buttons expand or collapse their page links without navigating. The current section opens automatically and highlights the current page. More than one section may stay open. Home, Search CURE and User Guide remain easy to reach. On mobile, use Toggle Sidebar to open the drawer; choosing a page closes it.
Appearance and contrast	Sidebar · Account · Appearance	Open your account name at the bottom of the sidebar to choose Light, Dark or System, view your role, or sign out. The adjacent Guide shortcut opens this guide directly. These controls share one compact row to leave more room for navigation. New sessions start with a light workspace, white cards and charcoal navigation. Dark uses distinct charcoal and slate surfaces. System follows your device appearance and updates when it changes. Your selection is remembered in this browser. Active pages have a highlighted row and a vertical marker; chart labels, controls and tables adapt to either theme.
Install CURE on your phone or computer	Sign-in, Home or Sidebar > Account > Install CURE	Choose Install CURE for instructions that remain available after dismissal. Android Chrome can offer a browser installation button; on iPhone or iPad, open CURE in Safari, choose Share > Add to Home Screen, enable Open as Web App if shown, and tap Add. Open the installed icon and sign in with your existing account. Installation does not download utility records for offline work. Saving, loading records, uploads, downloads and AI require internet access. When the connection drops, keep the page open to retain unsaved input and retry explicitly after reconnecting. Reloading or closing an unsaved page can lose that input. An offline launch shows a reconnect page. Voice stops when CURE is hidden or disconnected; return and tap the microphone to restart. Update now waits until guarded forms, uploads, typed assistant messages and active conversations are finished. Finish work in other open CURE windows before applying an update.
Contextual walkthroughs	Workspace header	Choose Help with this page to open Ask CURE with the current module in context. Choose Walk me through this module for the saved walkthrough, or ask a question or request form help directly. The User Guide has a book icon in navigation and conversation settings. Walkthroughs cover engagement setup, the billing audit lifecycle, shared correction review, Water/Sewer/Drainage assessments, Commercial ROI, contracts and reports. Progress is saved to your account for the selected utility and engagement. Home offers Continue a walkthrough. Reviewed steps do not complete or approve business work.

Destination	Route	Use
Utility and engagement selection	Workspace header	Select a utility once and continue across modules. Confirm the Audit engagement before editing. Supported deep links retain utility, engagement and reporting year, and restore them after reloading only when your account can access them. An invalid or unavailable selection gives a recovery message. Open audit workspaces and contract drafts retain their original ownership when the browsing selection changes. Unsaved work warns before page navigation or Back; keep editing to cancel the move.
Forensic Audits	/billing-intake	Follow Billing Data Intake, Billing Record Mapping, Billing Data Quality, Tariffs & Bill Calculations, Audit Checks, Audit Cases, Correction Review and Measured Results. An observed difference, a confirmed finding, implementation and verified measured recovery remain distinct states.
Service Pricing	/pricing	Commercial > Service Pricing manages CURE engagement fees and published pricing versions. This is separate from municipal tariff analysis in RatePulse. Existing administrator and publishing restrictions apply.
Council Mode	/council	Utility Workspace > Council Mode presents utility findings for council discussions. Reports sits in the same section. Sales pitch decks remain under Commercial.
Administration	/data	Administration contains Data Management, TWDB Refresh, Users, and the super-administrator Audit Trail. Billing Data Intake remains in Forensic Audits for engagement-specific source files.
Protected Texas Water Loss Atlas	/atlas	Open WaterPulse > Texas Water Loss Atlas after signing in. Atlas and individual utility profiles share the application navigation and retain their protected data access. This statewide view does not use the browsing utility selection as a filter.
Verified Experience	/verified-experience	Administrators prepare and review authorized anonymized summaries from verified source-linked measurements. Reusable ranges retain population units, scope and billing or collection basis. Attach a reviewed reference to a new Commercial ROI estimate with local assumptions; preserve its original copy in saved scenarios and proposal review appendices.
Contract Fee Ledger	/fee-ledger	Calculate and post recovery fees using an exact recorded agreement version and verified source-linked measurements. Save partial batch drafts, preview eligibility and fee windows, retain shared credit and refund adjustments, and inspect immutable postings and their source evidence. Administrator access is required. Save recurring statement schedules and generate completed monthly, quarterly or annual periods with correction totals, fee adjustments, remaining fee windows and supporting references. Download each retained statement as PDF or Word.

Destination	Route	Use
Measured Results	/measured-results	Compare retained billing or collection records before and after a recorded implementation, explain unrelated changes, inspect original row evidence, and retain separate reviewer decisions. Save partial settings and immutable versions; missing evidence stays unresolved.
Correction Review	/audit-corrections	Prepare case-linked corrections, deliberately share saved versions with assigned city representatives, and retain approval, disagreement, denial, withdrawal, implementation and reopening history. Private case evidence remains internal. Every action retains its responsible person, date, explanation and supporting evidence; implementation does not establish measured recovery.
Audit Checks	/audit-checks	Save versioned audit checks against completed billing mappings, run them in the background, and inspect retained evidence and repeatable results. Service/billing linkage, linked-field agreement and documented configuration comparisons distinguish observed differences, consistency on tested inputs, unresolved candidates and records outside the configured scope. No result automatically confirms a discrepancy or computes recovery. Record evidence-specific investigation decisions and supporting references, preserve earlier decisions, and filter the active investigation queue.
Audit Cases	/audit-cases	Investigate potential discrepancies with permanent case numbers, assigned investigators, affected records, source evidence, retained calculations and chronological history. Save partial work, inspect earlier versions and add follow-up notes without erasing their original text. Record evidence-specific investigation decisions and supporting references, preserve earlier decisions, and filter the active investigation queue. Attach exact generated check results and inspect their retained evidence. Follow linked corrections into city review and implementation history.
Tariffs & Bill Calculations	/billing-calculations	Save versioned rate books, select applicable schedules by service, classification, location, meter criteria and date, and retain expected charge calculations with explicit quantities and source references. Partial inputs remain saveable; incomplete or conflicting terms prevent a total.
Billing Data Quality	/billing-quality	Review an exact mapping run for missing identifiers, ambiguous relationships, required values, adjustments, unusual consumption and incomplete periods. Save versioned settings, inspect source records and retain review notes. Unknown interpretation remains visible; a quality flag is not a confirmed billing discrepancy.

Destination	Route	Use
Billing Record Mapping	/billing-mappings	Map customer, premise, service, meter, consumption and transaction records from retained imports. Save exact versions, configure composite references, inspect record provenance and preserve unmatched or ambiguous relationships. A matched key is not a confirmed billing discrepancy.
Billing Data Intake	/billing-intake	Retain large billing exports within a utility and engagement, resume uploads, inspect processing progress and reconciled counts, and download exact originals. Administrators and assigned investigators can process files; reviewers have read access. Raw values and prior attempts remain available without inferring billing relationships.
Utility engagement	/engagement	Create separate audit engagements for a utility, each with its own scope, owner, dates, contract reference, six workflow steps, assessments and measured results. Choose the engagement above the workspace or assessment screen; the choice carries through water scorecard exports. Existing utility work preserves earlier city records without inferring historical contract terms. Administrators can save incomplete details and manage team assignments. Investigators edit assessments and record results; reviewers finalize assessments and verify results. City representatives contribute shared updates and evidence/deliverable review steps. Engagement team accounts see only assigned engagements; city accounts see published assessments for their utility. Record baseline and measured periods with evidence references and adjustments; verify only after reviewing those records. Results cannot link to findings in another engagement. Day-normalized results remain separate from modeled opportunities and are not annualized or added together.
Rate coverage work queue	/rate-coverage	Administrators research active-client and pipeline gaps first. Review source links, missing effective dates, and retrieval dates, then open the utility review. The queue shows up to 200 prioritized service records and states the total needing work.
Home	/	Continue the selected utility engagement, see its recorded next steps, open common tasks, or browse the full directory of authorized workspaces. Home preserves the utility selection.
Utility Profile	/utility-profile	Review the governed service profile, published rate structures, source evidence, effective dates, and household-burden measures.
Reports	/reports	Create supported, branded WaterPulse reports for the selected utility.
User Guide	/guide	Search this guide, follow role-based workflows, and download the current PDF or Word edition.

Destination	Route	Use
Search CURE	Ctrl+K	Click Search CURE or press Ctrl+K (Command+K on macOS). Search all authorized pages by title, module or familiar terms. Utility searches query matching names and PWS IDs; choosing a utility stays on the current page. Refine the query when more than 20 utilities match.
Commercial ROI calculator	/commercial-roi	Start a Guided estimate with one opportunity and a few inputs. See additional billing first, then cash retained and net benefit as collections and costs are supplied. Advanced analysis contains evidence, fee schedules, sensitivity cases and JSON exports. Administrators can save complete or partial estimates; saved results remain unchanged.
Documents & Records	/documents	Retain PDF, Word, Excel, CSV, text and image originals within a utility and engagement. Search metadata and extracted text, inspect versions, preview scanned files, and archive or restore records. Staff choose internal or shared visibility. City representatives can upload shared submissions. Files remain quarantined until scanning passes; OCR is a candidate reading of the original.
Requests & Tasks	/work-requests	Create assigned information requests and tasks, set due dates, and retain responses and changes. City representatives can respond to their permitted requests with text, stored documents or new uploads. Staff review submissions before accepting them. This workflow does not send email.
Action Center	/action-center	Review open requests, tasks, contract obligations, engagement steps and administrator invoice follow-ups. Filter overdue work, the next seven days or submitted responses. Dates are entered records; missing dates remain unknown.
Contract Lifecycle	/contract-lifecycle	Administrators record obligations, renewal and notice dates, deliverables and amendment tracking against an exact saved agreement version. Attach supporting evidence. Tracking an amendment does not execute it or move an existing fee ledger to new terms.
Invoices & Payments	/invoices	Administrators prepare invoice drafts from retained fee-ledger postings, save bill-to details and dates, export branded PDF/Word or accounting CSV, record invoice issue and payments received, and retain correction history. One posting can belong to only one active invoice. Voids and payment reversals retain originals. No card charge, bank transfer, email or accounting-system write occurs.
Assistant Performance	/assistant-performance	Administrators review seven-day aggregate response, retrieval, website-action and voice timing. Counters retain no prompts, files, audio or user identifiers. Voice response timing begins when the provider recognizes the end of speech.

A practical reading order

- Confirm the selected utility and the page's as-of date.
- Read the source, provenance, completeness, and limitation notes.
- Separate public context, utility records, analyst observations, and assumptions.
- Read evidence coverage beside the performance score.
- Use the recommended action or export only after the preceding context is clear.

PART 3

Understanding the numbers

Five families of numbers run through the platform: what losses cost, what a programme can recover, what a scenario assumes and which findings are in scope, how a utility scores, and what an engagement charges. No two families answer the same question, which is why no two of their figures should ever be expected to match. Every entry below states what the figure represents, why it matters, and how to use it.

Foundations every figure rests on

Three choices sit underneath every dollar figure: which volume, which price, and how much the underlying data can be trusted.

Apparent loss and real loss

What it is: The annual TWDB water loss audit splits losses into two kinds that are different money. Apparent loss is water that reached a customer but was never billed correctly - meter under-registration, data-handling error, unauthorized use. It is revenue that should have been collected, addressable with billing and metering work and no capital. Real loss is physical leakage: the water never reached anyone, so there is no bill to recover, only production cost to stop wasting.

Why it matters: Summing the two produces a number a finance director will reject, because one is missed revenue and the other is avoidable expense.

How to use it: The platform keeps them apart everywhere; any figure that combines them says so explicitly. Never add them in your own material without the same statement.

The three prices

published tariff rate ($/kgal) - filed retail price - variable production or wholesale cost

What it is: A recovery number is a volume times a price. Apparent loss is valued at the published marginal tariff rate where a schedule is on file (citable and what the utility actually charges), falling back to the retail price self-reported on the filing. Real loss is valued only at variable production cost, or the actual wholesale contract price where one is on record - leaked water never generated a bill.

Why it matters: Pricing leakage at retail roughly doubles the figure and will not survive review. The adopted schedule disagrees with the audit figure for more than half the cities where both are on file.

How to use it: Before comparing two dollar figures anywhere in the platform, check which price each was built on; the price-basis panel on the revenue pages names it.

Figure basis: filed, derived, measured, regulatory, benchmark, scenario

What it is: Every exported figure carries a label saying where it came from. Filed: the utility said so, unverified. Derived: computed from public records, checkable. Measured: a test established it - the only basis that ends an argument. Regulatory: a placeholder the regulator inserted because nobody measured. Benchmark: supplied engagement experience requiring validation, but nothing about this utility was measured to produce it. Scenario: an assumption chosen for discussion, within stated model constraints, never quoted without the defensible figure beside it.

Why it matters: The basis is what lets a finding be raised without accusing anyone. A filing, a derivation, and a measurement are different claims even when they carry the same number.

How to use it: Say the basis when quoting a figure. 'The filing says X, the record supports Y, a test settles it' is a supportable conversation.

Meter accuracy assumptions: 94.7% and 99%

What it is: TWDB uses 94.7% in its financial-assistance apparent-loss threshold. It is not a universal accepted meter-accuracy ceiling. 99% is an illustrative application target, not a universal AWWA fleet standard.

Why it matters: Filed accuracy remains self-reported; current fleet accuracy requires representative test evidence.

How to use it: Use AWWA M6 for customer meter testing and M36 for water auditing and loss control.

The loss ladder

Four dollar figures are routinely all read as the opportunity, and they are not. The ladder states them in order, from the honest size of the problem down to the one number to quote. It appears as the bottom-line panel on the dashboard, Revenue Recovery, and the scorecard - a reader who stops after its first line should still be right.

1. Annual cost of water lost

apparent loss at retail + real loss at variable cost

What it is: What this year's losses cost in total.

Why it matters: The honest size of the problem - and not a target, because no system reaches zero loss.

How to use it: Establish stakes with it. Never present it as a promise or a recovery figure.

2. Real loss (leakage)

leaked gallons x variable production cost

What it is: The cost of physical leakage from mains and connections.

Why it matters: Reducible over years, with capital, through leak detection, pressure management, and main replacement. Its recoverable share is governed by the ILI, never a flat percentage.

How to use it: Present as delivered remediation work with a capital requirement and a multi-year schedule.

3. Apparent loss (delivered, never billed)

apparent gallons x retail price

What it is: The value of water delivered and never billed correctly.

Why it matters: Addressable through metering and billing work with no capital - but not itself the quote, because no programme recovers all of it.

How to use it: It is the pool serviceable recovery draws from, and the context for the quotable figure.

4. Serviceable recovery - the figure to quote

What it is: The share of apparent loss a programme is actually expected to return, component-weighted.

Why it matters: When a utility asks what the opportunity is, this is the answer - with its verification range where meter accuracy is unverified.

How to use it: Every other rung exists to give this number context, not to compete with it.

Recovery estimates

Six related figures estimate what an engagement returns. They differ in model, price, and ambition on purpose - each one exists for a specific conversation.

Serviceable recovery

meter loss $ x 45% + data-handling $ x 35% + unauthorized use $ x 20%

What it is: Projected year-one recovery from the commercial loss components, each weighted by how addressable that kind of loss actually is.

Why it matters: It weights a utility by the type of loss it has, not a flat percentage of everything - so a small system with a real meter problem ranks above a large one with a big but unaddressable number.

How to use it: Quote it as the year-one expectation. On the dashboard KPI it is summed across every system the current filters show - a market total, not any one utility's figure.

Conservative and optimistic brackets

conservative 25% / 20% / 10% - optimistic 65% / 50% / 35%

What it is: The same component model at deliberately lower and higher capture rates, bracketing serviceable recovery.

Why it matters: Sensitivity, not headlines.

How to use it: Conservative is the floor for a skeptical council; optimistic is what a clean engagement could reach. Never lead with optimistic.

Meter baseline sensitivity

Meter under-registration = billed gallons x (100 - accuracy) / accuracy

What it is: An alternative accuracy is a scenario assumption, not an evidence-derived confidence bound. Apparent and real losses must reconcile to the fixed water-loss total.

Why it matters: Changing baseline accuracy cannot create extra water loss.

How to use it: Keep baseline assumptions separate from post-correction meter targets.

Reducible leakage

real loss $ x max(0, 1 - target ILI / current ILI); illustrative targets 3.0 and 1.5; model floor 1.0

What it is: Legacy ILI targets are engineering model assumptions, not universal physical bounds. For systems below 3,000 connections use additional engineering evidence.

Why it matters: Use achievable remaining leakage and avoidable variable costs, including repair and capital costs.

How to use it: Enter explicit gallon targets in Commercial ROI; do not value leakage at retail revenue by default.

Billing-side recovery

affected eligible accounts x combined monthly charge difference x correction share x active months

What it is: Account configuration issues can affect dollars without changing gallons. Model all corrections to a charge together.

Why it matters: Collections, taxes remitted and costs determine retained benefit.

How to use it: Use Commercial ROI for drainage, exemptions, location, customer class, missing services, meter configuration and other charges.

Total assessed recoverable

modeled apparent recovery + modeled leakage savings; supplied account benchmark excluded

What it is: An annual opportunity estimate using application recovery assumptions; not realized cash or net ROI.

Why it matters: A fee base must be explicitly defined by the commercial agreement.

How to use it: Use the Commercial ROI cash model to include timing, collections, remittances, costs and fees.

Indicated annual recovery (the scorecard range)

What it is: The scorecard estimates opportunity from triggered criteria, filed apparent losses and peer comparisons. It does not automatically substitute a 94.7% accuracy assumption for the filed value.

Why it matters: Scenario assumptions cannot establish a utility-specific finding.

How to use it: Validate account and charge overlap before including findings in a commercial proposal.

Scenario and scope

Annual water scenarios and the commercial cash model expose their assumptions. The Conservative water preset uses filed inputs with a modeled ILI of 3.0; ILI 1.0 is an application reference floor. Commercial ROI models broader account and charge corrections, timing, collections, remittances, costs and fees.

The three presets

Conservative: filed baseline - Benchmark: 94.7% sensitivity - Aggressive: optimistic assumptions and ILI 1.5

What it is: All annual recovery presets include application assumptions. Serviceable rates are 45% meter / 35% data / 20% unauthorized; optimistic rates are 65% / 50% / 35%. The billing experience benchmark is never automatically added.

Why it matters: Labels distinguish assumptions from source facts.

How to use it: Commercial ROI separately compares 75%, 100% and 125% of the entered correction assumption, capped at 100% of eligible opportunity.

Bounded sliders

Legacy meter baseline floor: greater of 85% or water-balance constraint; modeled ILI floor 1.0; correction rates 0 to 100%

What it is: Legacy bounds are application guardrails. Commercial ROI separates baseline uncertainty from intervention targets and requires a nonnegative reconciled water balance.

Why it matters: 0% means no correction; 100% means all of the defined eligible opportunity, not all accounts or no physical losses.

How to use it: Document achievable targets, eligible population and excluded charges.

The filed-baseline scenario total beside every scenario

What it is: Whatever preset or slider position is chosen, the Conservative total prints next to it and the narrative names both.

Why it matters: A scenario never travels alone. A printed page that shows only the larger figure has turned a question put to the client into a claim about them.

How to use it: Read the pair together and quote the pair. If a document shows one without the other, do not circulate it.

Scorecard scope toggles

What it is: Each finding on the Water C.U.R.E. Scorecard can be switched out of the indicated recovery in front of a client. The range re-sums once per criterion over the findings left in, because two findings on one criterion draw on the same pool of recoverable water; if the first is switched out, the next on that criterion carries the value. The printed page states the scope.

Why it matters: A client who is only discussing the billing work should see a total for the billing work, and a public record should say what it left out.

How to use it: Switch findings out to match the work actually under discussion. Removing one to make a number look better is visible, because the page says what was left out.

Billing benchmark bands

under 10,000 accounts $18.52 - 10,000 to 25,000 $19.80 - 25,000 to 50,000 $18.67 - 50,000 to 100,000 $8.33 - over 100,000 $8.13 per account

What it is: Supplied experience figures require validation of period, sample, service coverage and recovery definition. Audit loss costs do not validate realized recovery. The former 19% and 43% overlap deductions are withdrawn; 100% of the benchmark is excluded from additive totals.

Why it matters: Overlap must be resolved with account, service, charge and source-period evidence.

How to use it: Use the supplied benchmark only for comparison; build additive opportunity from disjoint cohorts and combined corrected bills.

Allocation across water, wastewater and drainage

What it is: Bill proportions describe the composition of a benchmark bill. They do not prove how recovery is distributed among services.

Why it matters: The supplied experience benchmark has no evidenced service split.

How to use it: Enter service-specific opportunities in Commercial ROI; no amount is allocated from the experience benchmark into totals.

Exports carry the scenario and the scope

What it is: The Word and Excel exports from Revenue Recovery and the scorecard state which preset or slider position produced their figures, print the filed-baseline scenario total beside a scenario, and list any findings switched out of scope.

Why it matters: An export is where a number leaves the room. A figure that was clearly a scenario on screen must not arrive in a council packet without the same label.

How to use it: Check the scenario line and the scope line on the first page of an export before circulating it. If either is missing, export again from the owning page.

Commercial ROI and immutable snapshots

retained cash + avoided costs - implementation - ongoing costs - applicable C.U.R.E. fees

What it is: The calculator covers drainage, exemptions, rate location, customer class, missing services, configuration, taxes, prior balances, meters and leakage. Separate recurring billing, one-time collections, remittances and avoided cost. Unknown required inputs block totals; zero-cost ROI is not calculable. The fee base, term, assessment credit and subscription are explicit.

Why it matters: Cohort/service/charge/period checks prevent duplicate charges. A supplied account benchmark is comparison-only. Net ROI uses all utility costs as denominator, and sustained payback includes upfront costs.

How to use it: Select the utility, add disjoint opportunities and dated source evidence, enter costs, and compare conservative/base/upside cases. Executive and operator views share inputs. Save named immutable snapshots, compare their horizons and source versions, revise a copy, and export exact JSON. Source refresh is explicit. Use synthetic examples for demonstrations, then record actual measured recovery in Utility engagement.

Scores and ratings

Two scoring systems aim at opposite audiences: the C.U.R.E. score is for the utility, the target score is for the pipeline. Never show a utility its target score.

C.U.R.E. score (0-5)

What it is: The versioned assessment instrument: criteria scored 1-5 against observable anchors, weighted into domain scores and one overall figure. Unobserved criteria are excluded from the weighting, never scored as zero.

Why it matters: A score built on half the instrument is a different claim from one built on all of it, which is why the coverage figure always travels with the score.

How to use it: It is the structured conversation with the utility: each low criterion maps to a phased finding with a test, and the coverage gap doubles as the next phase's work plan.

Target score (0-100) and tier

34% financial size + 26% recoverability + 18% data confidence + 14% urgency + 8% buying readiness; Prime at 80, Strong at 65, Watch at 50, otherwise Nurture

What it is: A prospecting rank: how good an engagement target a system is, blending how much money there is with how reachable it is and how ready the buyer looks.

Why it matters: It is not a statement about the utility's competence.

How to use it: Sort the pipeline and pick who to call. It must never appear in client-facing material - that is what the C.U.R.E. score is for.

Data confidence and measurement risk

What it is: Data confidence (0-100) blends the filing's own TWDB assessment grades and docks points for every component carried at a regulatory default and for large source corrections. Measurement risk collapses it to Low, Moderate, or High.

Why it matters: TWDB defaults data handling for roughly half of filings and unauthorized use for nearly all of them. A large recovery figure sitting on defaulted inputs is a hypothesis, not a finding.

How to use it: High measurement risk means the first engagement deliverable is establishing the numbers, not recovering them.

Dominant opportunity

What it is: A one-word diagnosis of where the money is: Meter Accuracy, Billing Data, Unauthorized/Unbilled Use, Physical Loss, or Data Quality when the filing is too defaulted to say.

Why it matters: It picks the opening conversation.

How to use it: Physical Loss systems get the leakage and capital story; Data Quality systems get the assessment pitch, because nothing else is provable yet.

Diagnostics and ratios

The normalized figures that make one utility comparable to another, and an audit comparable to itself over time.

Non-revenue water (NRW) percent

What it is: Water that produced no revenue - losses plus unbilled authorized use - as a share of system input.

Why it matters: The headline waste ratio regulators and journalists use.

How to use it: Good for stakes-setting; too coarse to price an engagement from.

Infrastructure Leakage Index (ILI)

What it is: Real losses divided by the unavoidable annual real losses (UARL) - leakage as a multiple of the modeled reference level for that system's size and pressure.

Why it matters: 1.0 is the floor, not a goal; 3.0 is the programme target. It caps what may ever be promised.

How to use it: The only honest way to size a leakage opportunity.

Loss per connection per day

What it is: Real or apparent loss in gallons, divided by connections and by 365.

Why it matters: The size-independent comparison.

How to use it: Always read against the peer-cohort median - the gallons-per-connection sentence beside the peer median is the one that lands in a council meeting.

Peer excess cost

What it is: Loss above the cohort median, times connections, times 365, at the retail price.

Why it matters: What being worse than comparable utilities costs per year.

How to use it: Strong evidence the problem is fixable - peers are already doing it.

Apparent cost per connection

What it is: Apparent loss dollars divided by service connections.

Why it matters: The ranking equalizer.

How to use it: It puts a small system with a real problem above a large one with a big absolute number and no problem. Sortable on the dashboard, the signed-in Atlas and the portfolio, with the connection vetting tag beside it.

Nearby systems and the 75-mile peer radius

What it is: Every system is located: incorporated places to a Census place point, and the districts and water supply corporations that are not places to the centroid of the county they serve. Peer Comparison and the Rate Atlas choose peers within a radius, 75 miles by default with 25, 50, 100 or any typed distance, and the dashboard and each Atlas profile list the systems nearby.

Why it matters: TWDB region was the only proximity the platform had, and two cities in one region can be 300 miles apart. A council asks what the town down the road charges, and no amount of methodological care makes a similarly sized utility across the state answer that.

How to use it: Use the distance basis for the council conversation and the size or region basis for the defensible comparison; the page says which is in use. Distances are straight-line between place points, and a system located to a county centroid can sit tens of miles from its marker.

Connection vetting

people per connection against a 2.0 to 4.0 band - connections per occupied housing unit against 0.6 to 1.35 - filing age against a two-year limit

What it is: Whether the connection count behind every per-connection figure can be believed. Three tests: the population on the filing against the count, the count against occupied housing units from the Census where the system resolves to a place, and how old the filing is. The verdict, vetted, dated, check or suspect, sits beside each $/connection figure on the dashboard, the Atlas, the Rate Atlas and the portfolio, with the reasons a hover away.

Why it matters: Huntsville files 22,182 connections against 15,962 occupied homes, and the engagement's own contract data put it near 14,000. Prisoners and students count toward the population, so anything derived per capita is distorted there, and the platform had been dividing by the filed count without a word.

How to use it: A flag is a question, not a verdict: a system serving beyond its city limits reads high against Census housing and is perfectly correct. Where the Census place was matched on its name rather than joined on a GEOID, the tag says so and the figures are lower confidence. Ask about a flagged count before quoting anything per connection.

Burden share of revenue

What it is: Real loss at production cost plus apparent loss at retail, as a share of annual water revenue.

Why it matters: The ratepayer story: this share of what ratepayers fund goes to water that is never sold.

How to use it: Eliminating it offsets a rate increase of about the same size - the bridge from loss control to rate politics.

Year-over-year apparent cost change

What it is: This filing's apparent loss cost against the prior year's.

Why it matters: Trend and urgency.

How to use it: A rising figure feeds the urgency score; a falling one is evidence something the utility tried is working.

Engagement economics

One fee definition, used everywhere, so the software and the signed proposal quote the same deal.

The tiered recovery fee

45% on the first $250K of annual recovery, stepping down 2.5 points per tier to a 30% floor; 48-month term; assessment fee credited against the first recovery invoice

What it is: The fee on annual recurring recovered revenue - revenue newly billed as a result of the work, verified before it is charged for.

Why it matters: The declining tiers keep a large recovery from reading as a windfall, and the headline rate is the one that applies to the small recoveries most utilities actually have.

How to use it: The strongest sentence in the model: the utility keeps the corrected revenue permanently and pays a share of it for a fixed term.

Realisation schedule and the five-year projection

billing recovery realises 70% then 100%; leakage realises 25% / 55% / 80% / 100% over four years; the fee is charged on realised savings only

What it is: How the savings actually arrive, and what the fee is charged on each year.

Why it matters: Charging the full figure from month one would bill a utility for savings it does not yet have. The schedule is the form a finance director can drop into a five-year forecast.

How to use it: Leakage savings are verified against the utility's own next TWDB filing - which answers the only objection every savings-share contract gets: who says the saving happened. The year past the term carries recovery with no fee, and the projection shows it on purpose.

Why the surfaces show different numbers

Each surface answers a different question with the family of number built for it, so their headline figures differ by design.

Surface	Headline figure	Question it answers
Dashboard KPI	Serviceable recovery, summed over all systems shown	How big is the market my current filters describe?
Revenue Recovery	Total assessed recoverable at the selected scenario, with the filed-baseline scenario total beside it	What does the full engagement deliver, and what does it cost?
Water C.U.R.E. Scorecard	Indicated annual recovery range, over the findings left in scope	What can this utility defend in public from its own filing?
Bottom-line panel (all three pages)	Serviceable recovery with its verification range	What is the one quotable number, and how sure are we?

In one breath

The dashboard sizes the market, Revenue Recovery scopes the engagement, and the scorecard states what the utility can defend in public. They price different pools at different confidence levels on purpose, and each figure carries a caption naming the question it answers.

PART 4

Complete a C.U.R.E. assessment online

WaterPulse, SewerPulse, and DrainagePulse use a secure online response workflow. An invited utility respondent does not need a full platform account. The URL identifies the assessment; a separately shared six-digit code authorizes the response session.

Step	Owner	Action	What happens
1	Administrator	Select the utility and module	Confirm the utility identity and open the Water, Sewer, or Drainage C.U.R.E. assessment.
2	Administrator	Create a draft	Create the assessment only when evidence collection and review are ready to begin.
3	Administrator	Review public evidence and identity candidates	Verify authoritative identifiers before attributing public records. Keep public context separate from performance scoring.

Step	Owner	Action	What happens
4	Administrator	Send the secure invitation	Email or copy the assessment link. Share the six-digit code through a separate channel; the code is shown once.
5	Utility respondent	Complete and submit	Choose the observable anchor that best matches current practice, add notes and source references, save progress, and submit when complete.
6	Administrator	Review the staged response	Inspect answers and sources. Submitted responses do not alter the assessment until an analyst applies them.
7	Administrator	Complete evidence and scoring	Apply supported staff responses, register additional evidence, and leave unsupported conditions Not observed or Pending.
8	Administrator	Finalize and publish	Meet the module's domain and evidence-coverage rules, finalize the versioned snapshot, then review the client scorecard and exports.

Keep the two factors separate

Send the assessment URL by email and the access code by phone, text, or another approved channel. Do not paste both into the same message. The code is shown once and is not stored in recoverable form.

How utility respondents should answer

- Choose the observable anchor that best matches current practice, not the desired future state.
- Use Not observed, Applicability pending, or Not applicable when the instrument offers those states and the evidence requires them.
- Add a source reference and note that another reviewer can understand without guessing.
- Save progress, review the full response, and submit only when authorized to do so.

PART 5

Module reference

Each module answers a different class of utility decision while using the same governed identity, evidence, assessment, reporting, and export foundation.

C.U.R.E. UTILITIES MODULE - /WATER

WaterPulse

Revenue recovery, water loss, billing, metering, financial health, compliance signals, and operational intelligence.

Workspace	Route	Use it for
Dashboard	/water	Rank and filter utility opportunities, see how many systems the filters and the price predicate leave out, inspect the selected utility and the systems nearby, and export the current portfolio view.
Revenue Recovery	/recovery	Review serviceable recovery by loss component, cost of inaction, and engagement economics.
Water Loss	/water-loss	Inspect the water balance, loss components, trends, volumes, and costs.
Financial Health	/financial	Review supported operating, coverage, debt, and capital indicators.
Peer Comparison	/peers	Compare the selected utility with systems within a chosen radius, 75 miles by default, or with peers in its TWDB region; the page states which basis is in use and marks peers without source data for the year.
Compliance Advisor	/compliance	Review decision support derived from TWDB and TCEQ context; confirm source dates and limitations.
Billing Diagnosis	/billing-diagnosis	Prioritize probable billing-leakage causes and the tests needed to confirm them.
Multi-Year Story	/multi-year	Read longitudinal trends, cumulative impact, and supported inflection points.
Water C.U.R.E. Assessment	/cure	Admin: score the four-domain instrument, register evidence, share the secure response link, and finalize.
Water C.U.R.E. Scorecard	/cure-scorecard	Review the published domain scores, coverage, evidence grades, and supported recovery findings.
AI Action Plan	/action-plan	Turn supported findings into a reviewable sequence of actions, ranges, and performance indicators.
Route Planner	/route-planner	Admin: every located system on a map, a trip built from pins with leg distances, and the systems worth a detour along the drive.

Reference	Details
Data boundaries	TWDB water-loss filings are self-reported public filings; quality and staleness signals remain visible.; Water C.U.R.E. means Comprehensive Utility Revenue Evaluation in the WaterPulse instrument.; A grade describes operational efficiency; a dollar ranking describes scale. They answer different questions.
Supported outputs	Branded PDF reports; Branded Word reports; Branded Excel workbooks; Fillable and printable C.U.R.E. questionnaires

C.U.R.E. UTILITIES MODULE - /SEWER

SewerPulse

Wastewater compliance and collection-system resilience across DMRs, SSOs, wet weather, CMOM, SSOI, monitoring, and SOPs.

Workspace	Route	Use it for
Overview	/sewer	Review the operational portfolio, evidence availability, assessment scores, and public-data status separately.
DMR Compliance	/sewer/dmr	Review permit-limit performance, reporting completeness, recurrence, and corrective follow-through.
SSO Performance	/sewer/sso	Review overflow frequency, volume, cause, recurrence, notification, and corrective action.
Treatment Flows & Peaks	/sewer/flows	Compare average and peak wet-weather flow with documented capacity and aligned periods.
Monitoring Capabilities	/sewer/monitoring	Review telemetry, alarm health, escalation, redundancy, backup power, and testing evidence.
CMOM Program	/sewer/cmom	Review program ownership, preventive-work attainment, rehabilitation, and effectiveness.
SSOI Plan	/sewer/ssoi	Review applicability, executed commitments, annual targets, completion evidence, and TCEQ correspondence.
Internal SOPs	/sewer/sops	Review procedure control, field access, training, competency, data quality, and closure.
TCEQ Regulatory Intelligence	/sewer/tceq	Review source-bounded TCEQ incidents and regulatory context with explicit dates and availability states.
Sewer C.U.R.E. Assessment	/sewer/assessment	Admin: score 20 anchored criteria, review public matches, register evidence, invite the utility, and finalize.

Workspace	Route	Use it for
Sewer C.U.R.E. Scorecard	/sewer/scorecard	Review weighted domain results, evidence coverage, priority actions, and questionnaire exports.

Reference	Details
Data boundaries	EPA facility matches are candidates until an analyst verifies the NPDES identifier.; No public overflow match never means zero SSOs; source completeness and reporting period remain part of the evidence.; Public DMR, SSO, and TCEQ observations do not automatically score a C.U.R.E. criterion.
Supported outputs	Branded operational workbooks; Branded import templates; Fillable and printable C.U.R.E. questionnaires; Printable client scorecards

C.U.R.E. UTILITIES MODULE - /DRAINAGE

DrainagePulse

Stormwater compliance, drainage-system performance, flood resilience, capital readiness, and financial sustainability.

Workspace	Route	Use it for
Overview	/drainage	Review the portfolio, public-source coverage, utility records, verified identities, and assessment results as separate measures.
Statewide Public Data	/drainage/public-catalog	Explore TCEQ, TWDB, and related source coverage without treating candidates as verified local facts.
Permit, SWMP & Reporting	/drainage/permit	Review authorization, applicability, measurable goals, annual reporting, staffing, and evidence readiness.
Public Education & Involvement	/drainage/engagement	Review audiences, activities, participation, reporting channels, reach, and measurable-goal attainment.
IDDE & Outfalls	/drainage/idde	Review inventories, reports, screening, investigations, correction, follow-up, and recurrence.
Construction Runoff	/drainage/construction	Review active sites, plan review, inspections, deficiencies, enforcement, follow-up, and closure.
Post-Construction Controls	/drainage/post-construction	Review permanent controls, ownership, maintenance agreements, inspections, and deficiency closure.

Workspace	Route	Use it for
Municipal Operations	/drainage/municipal-operations	Review facilities, training, contractors, materials, SOPs, inspections, and corrective actions.
Drainage Assets & Maintenance	/drainage/assets	Review inventory, condition, criticality, inspections, preventive maintenance, backlog, and repeat failures.
Water Quality & TMDLs	/drainage/water-quality	Review receiving waters, impairments, pollutants, TMDLs, monitoring completeness, and BMP effectiveness.
Flood Risk & Events	/drainage/flood-risk	Separate modeled exposure from observed events and review warning, response, and repeat locations.
Capital Projects & Funding	/drainage/capital	Review need, benefits, cost, schedule, funding, readiness, and supported risk reduction.
Rates & Financial Resilience	/drainage/finance	Review fee structure, collections, dedicated revenue, O&M, debt, renewal, capital need, and affordability.
Drainage C.U.R.E. Assessment	/drainage/assessment	Admin: determine applicability, score 21 criteria, verify identities, register evidence, invite the utility, and finalize.
Drainage C.U.R.E. Scorecard	/drainage/scorecard	Review weighted performance, evidence coverage, recommendations, and branded exports.

Reference	Details
Data boundaries	An active permit establishes regulatory identity, not compliance.; A planning-level flood exposure is not an observed flood event.; Not applicable requires a documented basis and leaves the criterion out of the scoring denominator.
Supported outputs	Branded operational workbooks; Branded import templates; Branded scorecard workbooks; Fillable and printable C.U.R.E. questionnaires; Browser print/PDF scorecards

C.U.R.E. UTILITIES MODULE - /RATES

RatePulse

Rate sufficiency, water and wastewater financial scenarios, verified tariff intelligence, and utility-service profiles.

Workspace	Route	Use it for
Overview	/rates	Connect financial readiness with the selected utility and relevant operational evidence.

Workspace	Route	Use it for
Rate Sufficiency	/rate-study	Resolve source-ranked inputs and review system-average requirements, scenarios, coverage, cash, and benchmark bills.
Rate Atlas	/rate-atlas	Compare complete, verified schedules on a stated usage basis against the priced utilities within a chosen radius, 75 miles by default, or those of similar size; incomplete schedules fail closed.
Utility Profile	/utility-profile	Review service structures, publication state, source, effective date, modeled inputs, and burden measures.
Rate Review	/rate-review	Admin: parse, verify, version, and publish official rate schedules with traceable source evidence.

Reference	Details
Data boundaries	The current rate-sufficiency tool is a governed system-average decision model, not a completed customer-class cost-of-service study.; Water and wastewater inputs remain separate even when presented in a combined five-year scenario.; Rate Atlas declines to calculate a comparison when a required tariff element is incomplete.
Supported outputs	Branded rate-sufficiency PDF; Verified rate comparisons; Versioned published tariff records

C.U.R.E. UTILITIES MODULE - /DOCUMENTS

Engagement records and delivery

Connect original documents, signed agreements, client requests, deadlines and fee administration.

Workspace	Route	Use it for
Documents & Records	/documents	Retain PDF, Word, Excel, CSV, text and image originals within a utility and engagement. Search metadata and extracted text, inspect versions, preview scanned files, and archive or restore records. Staff choose internal or shared visibility. City representatives can upload shared submissions. Files remain quarantined until scanning passes; OCR is a candidate reading of the original.
Requests & Tasks	/work-requests	Create assigned information requests and tasks, set due dates, and retain responses and changes. City representatives can respond to their permitted requests with text, stored documents or new uploads. Staff review submissions before accepting them. This workflow does not send email.

Workspace	Route	Use it for
Action Center	/action-center	Review open requests, tasks, contract obligations, engagement steps and administrator invoice follow-ups. Filter overdue work, the next seven days or submitted responses. Dates are entered records; missing dates remain unknown.
Contract Lifecycle	/contract-lifecycle	Administrators record obligations, renewal and notice dates, deliverables and amendment tracking against an exact saved agreement version. Attach supporting evidence. Tracking an amendment does not execute it or move an existing fee ledger to new terms.
Invoices & Payments	/invoices	Administrators prepare invoice drafts from retained fee-ledger postings, save bill-to details and dates, export branded PDF/Word or accounting CSV, record invoice issue and payments received, and retain correction history. One posting can belong to only one active invoice. Voids and payment reversals retain originals. No card charge, bank transfer, email or accounting-system write occurs.
Assistant Performance	/assistant-performance	Administrators review seven-day aggregate response, retrieval, website-action and voice timing. Counters retain no prompts, files, audio or user identifiers. Voice response timing begins when the provider recognizes the end of speech.

Reference	Details
Data boundaries	Original files are retained in the application database with fingerprints; revisions preserve earlier bytes. Shared document visibility includes retained versions.; Signed originals attach to matching execution records after an administrator confirms the match. Uploading a signed-looking file does not independently verify signatures.; Ask CURE retrieves selected permitted document passages with source locators and versions. Search and extraction limits are disclosed. OCR errors and extracted obligations require review.
Supported outputs	Original document downloads; Versioned requests and responses; Branded invoice PDF and Word; Accounting CSV

PART 6

Exports, sharing, and administration

Choose the right format

Format	Best for	Guidance
PDF	Reading, presenting, archiving, or completing a structured questionnaire.	Use the page's PDF or Print/PDF action. Confirm the selected utility, as-of date, evidence coverage, and file name before circulating.
Word	Editable narrative reports and internal review before release.	Use the Word action on supported report pages. The export states the scenario that produced its figures, prints the filed-baseline scenario total beside any scenario, and lists findings switched out of scope. Treat edits outside the application as a separate document version.
Excel	Sorting, filtering, reconciliation, and governed operational imports.	Export from the owning page so the workbook includes the correct title, filters, source context, scenario and scope lines, and partner branding.
Browser print (Print button)	A dated paper or PDF copy of a scorecard exactly as the page presents it.	The page prints as a multi-page light-themed document with the partner brand header, regardless of the on-screen theme. In the print dialog, keep Background graphics on so score bars and signal colors print, and uncheck Headers and footers under More settings to remove the browser's own date and URL lines.
Secure online link	Collecting utility C.U.R.E. responses without requiring a full platform account.	Send the URL and code through separate channels. Do not paste both into the same email or message.

Brand check before circulation

Application-produced client deliverables should carry the C.U.R.E. Utilities identity and both official partner logos at equal visible size. If an export does not, do not circulate it; report the page and format to the program administrator.

Administrator practices

1. Guided engagement entry and draft preparation

Engagement page fields and guided entry edit the same form. Save for later retains an incomplete private working draft; Resume saved draft restores it for review. Create engagement or Save engagement updates the record and consumes the reviewed working-draft version. Help me fill this out uses the configured Grok route by default to propose supported field changes. Review the current and proposed values, Apply to page draft, then save. The assistant cannot change engagement status, permissions, publication or execution.

2. Preview before apply

CSV and Excel imports should be previewed first. Correct header and row errors before applying validated rows.

3. Preserve provenance

Record the source system or custodian, source reference, period, completeness, limitation, and evidence grade.

4. Verify candidates

Name or location similarity is not enough. Confirm the authoritative permit, entity, or station identifier before attribution.

5. Respect tenant boundaries

Confirm the selected utility before every import, assessment, and export. City users are limited to their assigned utility.

6. Check refresh status

Use data-status and refresh-history surfaces to distinguish current, stale, partial, failed, and unavailable source runs.

7. Publish deliberately

Finalization and tariff publication create versioned records. Review blockers, evidence coverage, and source dates first.

8. Document and commercial administration

Upload signed originals through Documents, linked to the agreement ID and exact version. In Contract Builder, choose the scanned signed file and matching execution under Signed documents. Confirm the match before attaching. Scanned CSV and XLSX originals can enter Billing Data Intake through Send to billing intake. Keep client-sharing decisions deliberate; general uploads do not automatically enter forensic processing. Invoice drafts use posted fees, not commercial ROI estimates.

Refresh and availability states

A successful refresh records the source period and completion status. A partial or failed refresh should not replace the previous complete snapshot. When a source is unavailable, show the last supported observation and its date rather than implying that the source returned zero records.

PART 7

Troubleshooting and glossary

Common problems

I need help completing a task, not another long handbook.

The User Guide starts with role-specific tasks and three onboarding steps. Each task has prerequisites, field examples, recovery instructions and PDF/Word quick references. Open a walkthrough beside the actual page, save your place, and use Check saved outcome for a specific permitted record. Explain it, Show me and Help me complete it open the same Ask CURE text/voice conversation with the selected task. Four synthetic practice exercises cannot write business records. The complete reference and detailed role playbooks remain available.

A walkthrough opens a different record, a working draft is stale, or AI is unavailable.

Confirm the utility and engagement in the header and the Open workspace selection on the page. A pinned editor retains its original owner. Reload current records when a version conflict appears; a stale draft can be inspected but is not automatically applied. Keep unknown information unresolved and use Information needed or Waiting on someone to save your place. Guided and direct page entry work without AI; failed AI requests never switch providers automatically.

A measured result is unresolved or a source-linked run fails.

Inspect the gaps and retained source rows. Confirm complete source coverage, explicit numeric/date formats, transaction-line identifiers, population changes, full periods and unrelated adjustments. Repeated selection of an original amount or transaction identifier fails the run; correct overlapping source selections or incomplete mapping keys and save a new version. Failed and cancelled runs retain their history. A calculated result still requires a reviewer decision.

A correction cannot be approved or marked implemented.

Confirm your engagement assignment and the correction status. Approval requires a shared version awaiting city review; implementation requires approval. A newer source case version or an explained, excluded or revision-needed investigation requires staff reconsideration. Reopen and revise the correction when appropriate, then share it for another decision. Earlier approvals and implementation records remain in history.

The app opens offline but my account pages do not load.

Reconnect to use account pages. An offline launch shows a reconnect screen; utility records and Atlas data are not stored for offline access. If a connection drops while editing, keep that page open and retry saving after reconnecting. Pending edits are not automatically sent. Reloading or closing the page can lose unsaved input. Voice requires a manual restart after returning to CURE or reconnecting.

An analysis says its source records changed.

Regenerate the action plan or compliance analysis before relying on it. Corrections to an existing year also change the source basis. Cached analyses expire after 24 hours.

An engagement step changed in another session.

Use Reload current step, review the saved version, then reapply your intended edits. Your conflicting save did not overwrite the other analyst's work.

A page asks me to select a utility.

Use the utility selector or press Ctrl+K, search for the utility, and select it without leaving the current module. City users are already restricted to their assigned utility.

The score or metric is blank, Pending, or Not observed.

This is an intentional evidence state. Check the page's missing-input, source, period, and limitation notes instead of treating the blank as zero.

A public record appears to belong to the wrong utility.

Do not use it. An administrator should reject the candidate or verify the correct authoritative identifier.

The utility completed an assessment, but the scorecard did not change.

Submitted responses remain staged. An administrator must review and apply them, complete evidence requirements, and finalize the assessment.

An import will not apply.

Review the preview errors, required fields, accepted file type and size, source references, and selected utility. Apply stays disabled while blocking errors remain.

A rate comparison is unavailable.

Rate Atlas fails closed when a required tariff element is incomplete. Review the source schedule and publication status instead of estimating the missing term.

A printed page clips to one sheet, keeps the dark theme, or shows screen chrome.

Reload the page first - printing depends on the current application version, and an open tab can predate a deploy. Then print again with Background graphics on. The date and URL lines at the sheet edges are the browser's own headers and footers; remove them under More settings in the print dialog.

The online assessment code no longer works.

Ask the administrator to create or regenerate an invitation. Codes are not stored in recoverable form and should not be requested through the same channel as the link.

A per-connection figure carries a check or suspect tag.

The connection count behind it failed a plausibility test against the population on the filing or against Census housing for the place, or the filing is more than two years old. Hover the tag for the reasons. Ask the utility about the count before quoting anything per connection; a system serving beyond its city limits can read high and still be right.

Peers are shown by region although Nearby was selected.

The system has no Census place coordinates, which is the case for most districts and water supply corporations, so a radius search is not available for it. The page falls back to the TWDB region and says so in the caption.

An export opens with unexpected utility or filter context.

Return to the owning page, confirm the utility and active filters, and export again. Do not rename a file in a way that hides its original scope or as-of date.

Glossary

Term	Definition
Apparent loss	Water delivered to a customer but never billed correctly: meter under-registration, data-handling error, and unauthorized use. Missed revenue, addressable without capital.
C.U.R.E.	The platform's versioned assessment method. In WaterPulse, the acronym means Comprehensive Utility Revenue Evaluation; SewerPulse and DrainagePulse apply the shared evidence-led method to their own domains.
CMOM	Capacity, Management, Operation, and Maintenance program for wastewater collection systems.
Connection vetting	The checks on a filed connection count: people per connection, connections per occupied Census housing unit, and filing age. The verdict sits beside every per-connection figure.
DMR	Discharge Monitoring Report used to report permit-related wastewater results.
Engagement benchmark	A figure from engagement experience rather than from this utility's record, such as the per-account billing recovery bands. Corroborated against the Texas filings, but nothing about this utility was measured to produce it.
IDDE	Illicit Discharge Detection and Elimination.

Term	Definition
ILI	Infrastructure Leakage Index: real losses divided by the unavoidable annual real losses (UARL). 1.0 is the model floor; 3.0 is the platform's programme target.
MS4	Municipal Separate Storm Sewer System.
NPDES	National Pollutant Discharge Elimination System.
NRW	Non-revenue water: losses plus unbilled authorized use, as a share of system input.
Real loss	Physical leakage from mains and connections. Avoidable expense rather than missed revenue; valued at variable production cost, never at retail.
Scenario	A recovery figure computed under assumptions chosen for discussion, within stated model constraints, and always printed beside the filed-baseline scenario total. A question put to the client, not a finding about them.
Serviceable recovery	The quotable recovery figure: meter-accuracy loss cost at 45%, data-handling cost at 35%, and unauthorized-use cost at 20% - the share of apparent loss a programme is expected to return.
SSO	Sanitary sewer overflow.
SSOI	Sanitary Sewer Overflow Initiative agreement and associated commitments with TCEQ.
SWMP	Stormwater Management Program.
TCEQ	Texas Commission on Environmental Quality.
TMDL	Total Maximum Daily Load for an impaired water body or pollutant.
TWDB	Texas Water Development Board.
UARL	Unavoidable annual real losses: the leakage a perfectly maintained system of a given size and pressure still has. The denominator of the ILI.

Support and privacy

For account access, data corrections, or workflow questions, contact the C.U.R.E. Utilities program administrator who issued your access. Include the utility name, module, page, and a description of the problem; do not email passwords, access codes, or confidential utility records.

Privacy notice: /privacy

Detailed role playbooks

Utility user

The Texas Water Loss Atlas and individual Atlas profiles require your CURE sign-in and, for non-administrative accounts, email verification. A direct Atlas link opens after you sign in. Atlas uses the same protected sidebar and Sign out control as the rest of CURE.

Sign in with the account supplied by the program administrator and complete email verification when prompted.

Open Home to continue an engagement or expand Utility Workspace, Forensic Audits, WaterPulse, SewerPulse, DrainagePulse, RatePulse, Commercial or Administration in the sidebar. Available tools follow your account permissions.

Confirm Utility and Audit engagement in the shared header. Reporting year appears where applicable. Statewide views clearly state that this selection does not filter their results.

Use the module overview first, then open the workspace that matches the decision you are making.

Treat Pending, Candidate, Not observed, and Not available as honest data states - not as zero performance.

For an assessment invitation, open the link and enter the six-digit code received through a separate channel.

City accounts see published assessments for their assigned utility. A water engagement without a published assessment shows an empty state; a newer analyst draft does not replace the published scorecard or export.

If assigned as a city representative for an engagement, open Correction Review or a correction link supplied by your team. Inspect the shared correction and evidence, then record your own approval, disagreement or denial with a date, responsible organization, explanation and supporting references. Your account is retained as the decision maker. Private investigation cases and internal draft versions are not included in this view.

Review a finalized scorecard or branded export only after its evidence coverage and as-of date are clear.

Ask CURE can take you to another module and continue your request there. For example, say Open Utility Profile and set annual income to 72000, or, if your role permits it, Open Utility Engagement, set the owner to Dana Example and save. It opens permitted pages and connected forms, carries your supplied values forward and reports the actual result. Watch its progress or choose Stop task. It keeps the selected utility and engagement, asks when a target is unclear, and never discards unsaved work. A save already in progress can still finish after stopping. Unconnected fields, approvals, execution, publication and outbound messages use their page controls.

Investigator, reviewer or city representative

Complete email verification, select an assigned utility, and confirm the Audit engagement selector before working.

Investigators can edit draft assessments, register linked evidence, manage invitations, apply submitted answers, update findings, and record measured results.

Reviewers can read drafts and submitted answers, finalize assessments, and verify measured results after reviewing evidence. Score edits remain with investigators or administrators.

Assigned city representatives can update the evidence and deliverable review steps and add shared updates; city accounts continue to see published assessments only.

Shared engagement updates are visible to the assigned team and authorized utility users. Use them for evidence requests and review progress.

Correction Review separates preparation, sharing and city decisions. Investigators prepare case-linked drafts and record approved implementation; reviewers share saved versions and may record documented outside city decisions. City representatives respond under their own accounts. Each action retains attribution and evidence, and reopening preserves earlier decisions and effective correction dates.

An assignment grants access to that engagement. Removal takes effect on the next server request; contact an administrator if the assignment needs correction.

Open Measured Results from an engagement or a recorded implementation in Correction Review. Save a partial measurement with its name, service, billing or collection basis, described population and source coverage. The workspace stays attached to its original engagement when global selectors change. Once linked, a saved plan remains attached to its correction.

Choose inclusive baseline and measured periods. Baseline must end before implementation and measured dates must start on or after it. Select completed transaction mappings for both periods, amount fields and signed multipliers, number formats, transaction dates or full service periods, population identifiers and exact scope filters. Explain the transaction grain, sign and relevance to billing or collections. Records crossing period boundaries stay unresolved; CURE does not automatically split their amounts.

Choose full-period or calendar-day normalization and currency rounding, and explain why it is appropriate. Confirm complete source coverage and review unrelated changes. Add signed adjustments with supporting references or mapped records; adjustment record amounts are not added automatically. Document when no adjustment is needed. Empty periods require a zero-activity explanation and completeness reference. Changes in population membership require an explanation.

Calculate a saved measurement and inspect its included, outside-scope and unresolved source rows. Repeated source amounts or transaction identifiers prevent a completed total. Missing evidence does not become zero. The adjusted change equals measured total minus normalized baseline minus unrelated adjustments, with displayed cents reconciling. Billed and collected amounts remain separate; a calculated result is not a verified result or contract fee.

Inspect original measurement sources and retained adjustment evidence. Investigators can flag a completed run as needing review; reviewers and administrators can verify a calculated result or exclude it with an explanation and supporting references. Review history retains each author and result fingerprint. Later correction changes preserve the original implementation basis and show its current status. Repeated runs start without a review.

Save before replacing a measurement or review draft. A failed request retains its content and retry identity. Refresh saved version and retain measurement draft, or Refresh review history and retain draft, loads current history while keeping your work for comparison. Existing Entered measurement totals in the engagement retain their manual amounts and narrative references; they have not been recalculated from transaction rows.

Ask CURE can take you to another module and continue your request there. For example, say Open Utility Profile and set annual income to 72000, or, if your role permits it, Open Utility Engagement, set the owner to Dana Example and save. It opens permitted pages and connected forms, carries your supplied values forward and reports the actual result. Watch its progress or choose Stop task. It keeps the selected utility and engagement, asks when a target is unclear, and never discards unsaved work. A save already in progress can still finish after stopping. Unconnected fields, approvals, execution, publication and outbound messages use their page controls.

Administrator

Select the utility from the city selector or command palette before entering a module.

Open Ask CURE, open Conversation settings, and choose Selected saved evidence under Answer using to ask about saved forensic evidence. Select the engagement, open Add saved evidence, choose a type and search by title or record number. Select up to eight sources. A versioned source can use a saved version number or the current permitted version. The catalog contains only records available to your role in that engagement.

Choose Inspect selected evidence to read the source snapshot without AI processing. Source facts include the record and version, fingerprint, scope and limitations. Large records are bounded excerpts with omissions identified. Billing calculations and measured results retain their saved numeric values; an entered measurement is distinguished from a calculation using billing transactions.

Enter a question in the shared composer and choose Send question. Read E1, E2 and the other citation buttons to inspect the cited snapshot. Statements distinguish AI summaries from AI interpretations and list evidence still needed. A valid citation identifies a selected record, but does not certify the explanation or verify a recovery. No records are changed by asking a question. Private processing must be configured; a failed request keeps the question for retry. Access and evidence are checked again before an answer is returned.

Ask CURE conversations stay in memory when the panel is closed and reopened. Changing utility, engagement or account clears the conversation. Changing the evidence selection preserves displayed answers but limits subsequent conversation context to the exact selected sources. Later source changes require a new question. City users can read published assessments and entered measurements; assigned city representatives can also select shared corrections. Internal billing evidence and cases require an investigator or reviewer assignment, and contract drafts, fee ledgers and statements require administrator access.

Open Utility engagement to track owners, next actions, due dates, and progress from evidence review through measured outcomes.

Create Engagement team accounts in User Management. Assign investigators and reviewers separately within each engagement; assign city representatives from that utility's city accounts.

Review the module overview, source freshness, and missing-input notices before interpreting a metric.

In Ask CURE, the microphone beside Send question starts Grok Voice Think Fast 2.0. Typed messages, voice transcripts, selected-evidence answers and task results share one conversation. Voice status, mute/unmute and End voice appear inline, without a second popup. Focusing the text input pauses the microphone; sending while voice is active uses the same connection. Ending voice preserves the conversation for typing. Restarting includes up to eight recent turns from the same evidence context, each limited to 2000 characters. Conversation settings contain evidence selection, form selection, voice choice and processing details. Ara is the default warm female voice, with natural American English instructions. Voice choice is remembered in this browser. Routine spoken replies are brief; you can ask for more detail. Starting voice sends microphone audio and selected context to xAI. Workspace voice can open modules, fill connected forms and save when you say and save. The microphone pauses during website work and resumes its previous state. End voice stops unfinished website work; a save already submitted may still finish. Closing Ask CURE, changing workspace or hiding the tab stops audio. Escape closes settings first, otherwise closes Ask CURE and restores focus to its opener. Guided engagement setup and draft preparation retain their own Start voice and Use this in the form controls. Sessions end after ten minutes or ninety seconds without speech or typed activity.

Ask CURE understands the available modules and retrieves relevant saved evidence for each question. Administrators can discuss business priorities, opportunities, proposals and client meetings; city users receive patient explanations and practical steps within their assigned access. Workspace knowledge works without a water audit and offers cited sources, a What the assistant reviewed disclosure and Take me to buttons for useful pages. Selected saved evidence retains precise manual source selection within the same conversation. General voice can look up a new topic during the conversation using the same authorized workspace. Retrieval is bounded, not a complete search of every record; uploaded Documents can contribute permitted, scanned text excerpts with source locators; other unsaved forms are not automatically read. In Conversation settings, selecting Work in a form includes that form's offered current values. Tell the assistant the information to fill it, and say and save to invoke its normal save. Exact standalone requests such as Open Utility Engagement open the permitted page directly without an AI planning call. Multi-step work uses faster reasoning for navigation and field entry; substantive questions retain deeper reasoning. Name the target form or choose it yourself; the assistant asks if several targets match. No form: questions only excludes unsaved values. Connected forms include engagement details and assigned workflow steps, contract draft details, editable assessment criteria, case/correction/measurement descriptions and dates, manual financial entry and utility-service scenario inputs. Other fields and lifecycle actions use their page controls. Changing utility, engagement or account clears the conversation. The assistant cannot send messages or approve work. Successful form saves report the actual result; failed saves retain entered fields, and competing manual edits reject stale AI changes. It does not retain long-term conversational memory.

Check the AI processing notice before extracting financials or contacts, drafting a briefing or action plan, reviewing anomalies or market opportunities, generating council notes, or asking a freeform question. All AI tasks use xAI Grok by default, including selected client evidence and freeform instructions. Grok 4.6 is the current text model. The processing notice identifies the configured route. Requests do not silently switch providers after failure. Calculated benchmark answers and manual data entry remain available.

CURE runtime request logs exclude billing rows, uploaded document content, questions and model answers. When an unexpected request error shows a reference, quote that reference to support. Saved source evidence remains available to authorized users. All AI tasks default to xAI Grok under the configured server routing; browser inputs cannot change the provider, model or permissions.

In Data Management, select the utility and paste financial statement text or upload a supported PDF. Extracted candidates show their processing provider and model. Check each value against the source, leave missing values unknown and save only after review. A failed extraction retains the pasted text so you can retry. Grok processes the selected source material. The optional private provider connection remains available for a future deployment; the planned DGX Spark cluster is not required for the current Grok features.

On Revenue Recovery, start on the Conservative preset. Show Benchmark or Aggressive only with the filed-baseline scenario total printed beside it, which the page does for you.

Open Commercial ROI and start with Guided estimate: choose an opportunity, enter affected accounts and a monthly change, or try a fictional example. Add collections and costs when ready; missing inputs stay unknown. Advanced analysis contains evidence, fee schedules, case comparisons and exports.

On Commercial ROI, open Explore discrepancy patterns to search by review area or topic. Read required evidence, review steps, common exceptions and unresolved conditions before treating a pattern as a finding. Browsing the library does not fill in financial assumptions.

In Guided estimate, open Choose a scenario starter. Select a review example and choose blank inputs or clearly fictional numbers, then Add this starter. Existing opportunities and costs stay in place. Save incomplete work with Save estimate; reopen it from Saved estimates and Revise estimate to continue. Account group, timing and evidence shows the starter reference and lets you document current inputs. Source-derived projections and mixed inputs are labeled; none is verified recovery.

Under Include project costs, choose whether the fee period is one engagement term or a term for each correction, then enter its length in whole months. Zero explicitly means no fee period; a blank term can be saved but leaves net benefit unknown. Each correction uses its opportunity start month in the separate-term mode. Review fee periods by correction shows the modeled windows; the utility benefit can continue after fees end. Tiers and the assessment credit stay shared across the engagement. These are scenario assumptions to confirm against the agreement.

Open Fee base, refunds and one-time amounts to choose incremental billing, collections before pass-through, or cash retained by the utility. One-time amounts and avoided costs enter the fee base only when selected. A negative one-time amount is a refund, paid once in its start month. Choose who funds a refund; shared funding assumes the recipient returns its portion in that month. Refund offsets may apply in the same month, reconcile within the same fee year, or be excluded from fees. Review the fee calculation shows applied amounts, fee reversals and assessment credit restoration. An unknown refund funding choice can be saved but does not produce net benefit.

In Commercial, open Contract Builder, select a utility and start a contract draft. Enter parties, services, scope, deliverables, dates and commercial terms as they become known; blank sections can be saved. Save draft preserves a version. Reopen from Saved drafts, choose Revise latest version to continue, and inspect prior content under Saved versions. Changing the utility selector does not move an open draft. A conflicting save preserves your edits and requires reviewing the latest version. Save before leaving the page. Commercial drafts are administrator-only; saving does not sign, execute or send an agreement.

In Contract Builder, choose Add proposal pricing to link a saved ROI scenario and sensitivity case to a fee schedule version. Add service and travel items separately, then describe how schedule fees apply. The itemized amount covers entered lines only; unknown prices and undecided travel remain unresolved. Saved versions retain their quoted sources and amounts when defaults change. Refresh fee schedules to select a newer version explicitly. Review linked ROI assumptions: quote edits do not recalculate the saved estimate or turn it into verified recovery.

In Contract Builder, open Manage agreement templates and clauses to save reusable wording and assemble templates from specific clause versions. Add agreement sections to a draft, apply a selected template or clause, fill its business fields, and review the completed wording. Missing provisions remain unresolved and can be saved. Changing wording or a filled value requires another review. Saved versions keep their original clause sources and completed text.

To record an agreement already signed outside CURE, open its exact saved version and choose Record prior execution of version N. Resolve and review its agreement sections, enter the execution date and retained signed-document reference, and confirm that the saved version matches the signed document. CURE preserves that version and its fingerprint. Withdraw recording corrects tracking mistakes while retaining their history; it does not cancel the agreement. These controls do not obtain signatures or upload the referenced document.

In Contract Builder, add Recovery fee settings when an agreement will support a fee ledger. Explicitly enter the billing, collection or retained collection basis, services, start and duration, shared graduated fee pool, tiers, initial credit, rounding and treatment of negative changes and one-time recoveries. Explain eligibility and the supporting agreement wording, then review the complete settings and save. Changing a setting invalidates its review. The settings are included in saved agreement exports; an execution recording requires them to be complete and reviewed when present.

In Commercial, open Contract Fee Ledger and open the selected utility and engagement workspace. Start a ledger from a current execution recording of an agreement saved for that engagement. Its exact version, fee settings and original execution evidence remain attached. One ledger is allowed per agreement in the engagement. Later agreement drafts do not replace its terms. A withdrawn execution recording prevents new postings while retaining history; this edition does not move a ledger to an amended agreement or replacement execution recording.

Choose New fee batch, name its posting period, and add verified measured recoveries or documented adjustments. Save incomplete work with Save fee batch draft. A measurement must fit the posting period and its contractual fee window; crossing a fee or anniversary boundary needs a separately supported interval. Additional eligibility adjustments use signed amounts and supporting references. A retained collection basis requires an explicit pass-through review, including a documented no-deduction decision where appropriate.

Choose Preview saved fee batch and resolve any gaps before posting. Graduated tiers and credit are shared according to the retained settings. Check the source evidence and amounts, confirm your review, then Post reviewed fee batch. Posting requires the latest saved draft and unchanged preview evidence and ledger balances. An interrupted save or post can be retried without duplicating it. Repeated measured transactions and overlapping periods for the same correction cannot be posted twice in one ledger.

In Contract Fee Ledger, record later refunds or eligibility changes as signed adjustments to an original measured entry. They return to that entry's fee pool and retain its original fee window. Negative performance fees first reverse previously charged performance fees, then restore applied credit. Direct fee adjustments stay separate from the pool and credit; later credit grants apply to future fees, and credit removals cannot exceed the unused balance. Use the same latest posting period or a later nonoverlapping period. Posted history shows exact saved batch notes, verification evidence, sources and balance reconciliation, and flags changed reviews or withdrawn execution recordings. Ledger amounts do not establish invoicing, payment or a cash refund.

In Contract Fee Ledger, open Recurring recovery statements. Save a statement series with a name, first period start, monthly/quarterly/annual frequency and notes. Partial schedules remain saveable. Revisions retain earlier schedules, and existing statements keep the schedule version used to generate them. Period numbers follow anniversaries of the original start, including month-end clamping.

Choose a fully ended statement period and generate it from saved ledger postings. Complete posting periods must fit within the statement; CURE does not prorate a posting across a boundary. Review eligible revenue, fees, credits, direct adjustments, opening and closing balances, correction references and remaining fee windows. Remaining calendar days are not forecast revenue. A period with no postings means zero posted changes at the retained ledger sequence, not zero utility activity or complete measurement coverage. Select the next period to continue the schedule; generation is deliberate and does not email, invoice or collect payment.

Open a retained recovery statement to download its branded PDF or Word copy. It retains the exact agreement version, ledger sequence, source references and balance reconciliation. Later adjustments retain their original measurement periods and fee windows. Later postings, schedule revisions or changed reviews do not rewrite a saved statement. Generating the period again creates a separate retained statement at the current ledger sequence. Current evidence notices are shown separately from the saved statement and its exports.

In Contract Builder, open Manage procurement documents and catalogs to retain private award, fee schedule and amendment originals (PDF, DOCX, XLSX, UTF-8 TXT or CSV, up to 15 MiB). Start a catalog, select its sources, enter scope and fee entries, and review them against the originals. Preview fee schedule CSV entries before appending or replacing working rows. Save incomplete work; each saved version retains its content and original file hashes. Changes to catalog values or source selections require another review.

Within Proposal pricing, choose Add procurement catalog mapping, select an exact catalog version, and map each service or travel item with a scope explanation. Missing selections stay unmatched; unknown terms, unit or price mismatches, and stale reviews remain unverified. Review boxes apply to the current line and catalog values. Saved proposals preserve their source documents, entry copies and review results. The unmatched percentage covers entered itemized amounts only, and remains unresolved when totals are unknown or zero. The discussed 25% allowance is unverified and is not applied as a rule; a reviewed mapping does not establish procurement eligibility.

To export a proposal or agreement, open its saved version in Contract Builder and choose Download Word or Download PDF. Save working edits first; the export uses the selected saved version, including its retained wording and calculated prices. Documents include partner branding, scope and pricing tables, unresolved inputs, blank signature fields and a saved-content fingerprint. Select Include source and review appendix only when you want source references, review notes, planning estimates and internal commercial assumptions included. Downloads do not sign or send an agreement. If PDF cannot render a character faithfully, use Word, which preserves the text.

Open Billing Data Intake, select the utility and Audit engagement, then choose an XLSX or UTF-8 CSV export up to 128 MiB. Administrators and assigned investigators can upload and process files; assigned reviewers can inspect them. Upload progress shows retained bytes. If interrupted, open the import, select the same original and choose Resume upload. Previously retained pieces are checked before new pieces are added. Processing continues in the background after the upload finishes.

In Billing Data Intake, open an import to review its original SHA-256 fingerprint, processing attempts, worksheet counts and raw row previews. The first nonempty row of each worksheet is retained as its header; hidden sheets are included and formulas are not executed. Completed counts reconcile source rows to headers, blanks and retained data rows. Counts for unfinished attempts are partial. Download original returns the retained source. Process original again creates another attempt; later files and retries preserve earlier evidence. Intake attempts retain parsing history; mapping versions are tracked separately in Billing Record Mapping. Preview fields may be shortened; the original preserves their full contents.

Open Billing Record Mapping, select the utility and engagement, and choose Open mapping workspace. Create a mapping plan, add record mappings, select completed source attempts and worksheets, and choose field columns. One worksheet can supply several record types. Configure composite identifier columns in order when the source supports them; missing identifiers can remain unconfigured. Changing a source clears its field and key selections. Save partial work before leaving.

Add relationships by choosing source and target record mappings and source reference columns in the target identifier order. Keys use exact text and preserve leading zeros. Ignoring outer whitespace is an explicit target setting; case remains significant. Missing, invalid and unconfigured keys stay unresolved.

Exactly one target produces a matched link; duplicate target records remain ambiguous and are not silently deduplicated.

Save the mapping, then run its exact saved version. Run history retains its mapping version, engine version, source fingerprints, counts and outcomes. Inspect a record to review its original file, attempt, worksheet, row, raw values and relationships. Inspect target record opens a unique match; Inspect candidates shows ambiguous alternatives. Raw dates, units and transaction codes still require interpretation. A matched key does not establish billing correctness, and incomplete runs stay out of audit calculations.

Revise latest mapping version creates another saved revision. Earlier runs retain their earlier sources and field selections. Changing the utility selectors does not move the open mapping workspace. Switching a workspace or replacing an editor with unsaved changes requires a choice; save first to retain the work. Administrators and assigned investigators can save and run mappings, while assigned reviewers can inspect them.

Open Billing Data Quality, select the utility and engagement, and choose Open quality workspace. Create a quality plan and save partial work. Select a completed source mapping run, then configure required fields, number interpretation, documented adjustment codes, consumption limits and actual period boundaries where the source supports them. Changing the source replaces working record settings; saved versions retain their original source.

Run saved quality version N to inspect an exact set of settings. Identifier and relationship checks use the source mapping. Incomplete definitions remain visible as configuration limitations. Consumption bounds need an explicit unit; a posting date alone does not establish a service period. Period coverage merges overlapping intervals within each configured group before identifying gaps. Groups absent from the source still require separate population evidence.

In a quality run, filter by flag category, record mapping or review disposition. Inspect quality flag opens its observed evidence and source row; inspect duplicate records or relationship candidates without selecting an automatic match. Download original source preserves the original file. Incomplete runs show partial results and cannot support calculations. The affected-record percentage counts distinct records with row-level flags, separately from group and configuration flags.

Administrators and investigators can configure and run quality reviews. Investigators and reviewers can save a reason with Needs investigation, Explained or Recommend exclusion. Review history retains earlier decisions; stale edits keep the working note and require reloading the current decision. Save notes before switching flags, runs or workspaces. These notes do not change source data, apply corrections or establish billing correctness. New runs retain separate review histories.

Open Tariffs & Bill Calculations, select the utility and engagement, and choose Open billing workspace. In Rate books, save partial work, add rate schedules or copy a stored utility rate as an unfinished interpretation. Copied sources remain separate from edited terms. Configure service, class, rate location, meter criteria, inclusive effective dates and charge order. Unknown applicability differs from an explicit rule that applies to any value.

Enter fixed, quantity-based, tiered, percentage, minimum, cap or subtotal-factor charges. Per-dwelling charges need an explicit dwelling count; a missing count is not one. Quantities and units match the entered rate terms. Specify money rounding per charge or tier line, or at the total, and the rounding tie rule. Resolve copied source terms, mark all applicable terms entered, and include the schedule in rate selection. Overlapping or incomplete possible matches still prevent a total.

In Bill calculations, select an exact saved rate book version, enter the applicability date and explain why that date determines the rate. Add required quantity fields; leave unknown values blank and enter zero only when known. Attach supporting mapped records and inspect their original sources. Inputs are entered explicitly; source values, unit conversions and meter multipliers are not inferred. Dates do not automatically split or prorate a billing period; record required segments or documented factors separately.

Save bill inputs, then Calculate saved input version N. Calculation history retains the selected terms, input version, source references, charge lines, fingerprints and unresolved conditions. A total-rounding reconciliation line makes displayed lines equal the total when needed. Later rate or input revisions do not alter earlier results. Administrators and investigators can save and calculate; reviewers can inspect. Save before changing workspace or view. An expected charge is not a confirmed discrepancy, collection or recovery.

Open Audit Checks, select the utility and engagement, then Open check workspace. Start a check plan, select a completed mapping run, and add service/billing linkage, linked field agreement or documented configuration comparison checks. Save incomplete plans. Each check records its source mapping, comparison basis, evidence reference, population and time scope, and rule version.

Choose the relationship and fields supported by the source. Linked field agreement compares one uniquely matched record; documented configuration comparison uses an explicitly entered expected value. Choose exact text or exact decimal interpretation. Numeric comparisons need a common unit, including unitless where applicable. Scope filters all need to match; no filters means every record in the selected mapping is evaluated. Changing the source replaces working checks after confirmation, while saved versions remain available.

Save check, then Run saved check version N. Processing continues in the background with cancellation available to investigators and administrators. Filter observed differences, consistent results, unresolved candidates and records outside configured scope. Missing, ambiguous, formula-derived or unusable evidence stays unresolved. A consistent result covers only the tested inputs; it does not establish billing correctness. Absent service/billing links do not establish unbilled service, and multiple bill lines may be legitimate.

Inspect check result to see its captured comparison inputs, required evidence, limitations and original source records. Source inspection verifies the retained record fingerprint; other related records are additional context. Execution and repeatability shows saved settings, evidence, rule versions, execution times and a completed-result fingerprint. Repeating unchanged checks and evidence produces the same result fingerprint. Counts are record/check evaluations, not distinct accounts or recoveries. Incomplete runs retain partial results and cannot establish a completed audit review. Reviewers may inspect; city representatives and ordinary city accounts cannot access this internal workspace.

Open Audit Cases, select the utility and engagement, then Open case workspace. Start a case or search by its title or permanent CURE-CASE number. Save incomplete work; record the investigation question, discrepancy type, affected service and period, and investigator as information becomes available. Selecting a pattern exposes its evidence requirements and exceptions without confirming a discrepancy.

Attach affected and supporting records from completed mappings, inspect their original values and relationships, and explain their relevance. Add exact retained calculation results and original billing files when useful. Other evidence references record a document's location; they do not upload or verify it. Unresolved calculation totals remain unavailable, and attached amounts are not summed into a discrepancy or recovery.

Save audit case appends a version with the source fingerprints and investigator attribution. Revise latest case version to continue. Case notes and history retain earlier versions, source references, authors and times. Add a note about the displayed saved version; use Follow up note for corrections or additional context while preserving the earlier text. Save case details and notes before switching cases, versions or workspaces; conflicting saves preserve working edits.

In a saved case or completed check result, open Investigation decisions to document a legitimate arrangement, pre-existing city work, invalid assumption, insufficient evidence or another reason. Choose Needs investigation, Revision needed, Explained or Excluded; enter an explanation and cite supporting evidence. Explained, excluded and revision-needed decisions require a reference. References are retained as investigator citations, not independently verified documents. Administrators and assigned investigators may record decisions; reviewers may inspect history.

Investigation status filters include an Active investigation queue. Explained and excluded items leave this queue; revision-needed items stay active. Original check outcomes, calculation amounts and counts remain unchanged. A revised case returns to investigation, and a new check run receives no inherited exclusions. Earlier decisions retain their exact evidence fingerprints, author and date. Reopen by recording Needs investigation with a reason. Save decision drafts before switching workspaces or records. If another decision is saved first, refresh the evidence and history, review them, and then save the retained draft.

Administrators and assigned investigators create and revise audit cases; assigned reviewers can inspect and add notes. New investigator selections require an active administrator or a verified investigator assigned to the engagement. Naming an investigator does not grant access. Earlier attribution remains after reassignment, and a saved investigator who is no longer eligible is identified. These internal cases are not shared with ordinary city accounts or city representatives.

In Audit Cases, open Generated check evidence to select a completed Audit Checks run and attach exact results with an explanation. Inspect their captured comparisons and original source records. Saving the case retains result, settings, source and engine fingerprints. Earlier case versions keep their original evidence; attaching a difference does not confirm a correction or recovery.

From a saved case, choose Open correction workspace for this case, or select an engagement in Correction Review. Start a correction and save incomplete work. Enter the observed condition, proposed change, affected scope, service and period, responsible person and organization, and supporting evidence. Expected effect is descriptive and can remain unknown. Drafts remain internal until a reviewer shares a saved version. Inspect internal source case is available to assigned staff; its private content is not automatically shared.

A reviewer or administrator chooses Share for city review, enters the action date, responsible organization, explanation and supporting references, and then chooses Share correction version N. Review the correction wording and evidence for its intended city audience before this final action. Later private revisions do not replace the shared version. Earlier internal draft events remain private after sharing.

Assigned city representatives can approve, record disagreement or deny a shared correction under their own account. A reviewer or administrator recording a city decision made outside CURE must identify the outside responsible person and organization and cite the supporting communication. The application retains both the decision maker and the person recording that decision. Referenced documents are not fetched or independently verified.

After approval, an investigator or administrator can Record implementation with its action date, effective correction date, responsible person, explanation and evidence. Future action dates are rejected; the effective correction date cannot follow the action date. History also retains the server recording time and account. Recording implementation does not alter city billing or establish billed, collected or recovered amounts.

Withdraw a correction before implementation when appropriate, or Reopen correction to begin another review cycle. Reopening preserves earlier city decisions and implementation dates; it does not reverse city billing. Revise the reopened correction, then share it again for another city response. A newer case version or an explained, excluded or revision-needed investigation blocks another submission, approval or implementation until the evidence is reconsidered. Use latest saved case version updates the source reference while preserving the working correction wording for review.

Correction history retains saved versions and dated events with supporting evidence and attribution. Save correction details and action drafts before replacing a record, version or workspace. A conflicting or uncertain response preserves working text. Refresh correction and action history to inspect current state while retaining an action draft; retry an unchanged uncertain save to recover its original event without duplication.

Verify candidate public identities before attributing permit, DMR, overflow, MS4, flood-planning, or station records.

Use the branded template for operational imports; preview and correct blocking errors before applying rows.

Create the C.U.R.E. assessment only when the team is ready to register evidence and score criteria.

Send the invitation link to the authorized utility contact and share the access code separately.

Review submitted answers, apply them as staff-reported evidence, and supplement them with supported records.

Finalize only when every required domain is addressed and the page's evidence-coverage threshold is met.

Export the scorecard, report, or workbook from the page that owns the analysis so its context travels with it.

Open Verified Experience in Commercial or follow Prepare authorized experience for Commercial ROI from a verified measured result. Select the utility and engagement, start a private record, choose its source measurement and save partial work. Its source correction must currently be implemented and the completed measurement must have a current verified review before release.

Describe the actual source population unit and interpretation privately. Write anonymized population/exclusions and comparability text for reuse. Choose enclosing dollar, population and duration ranges; zero remains zero. These two text fields and reduced ranges form the reusable summary. Do not include source names, locations, contacts, record identifiers or source references. Screening and reduced precision support human review; they do not certify anonymity.

Under Private source interpretation and reuse authorization, record who authorized use, the date, retained authorization reference, scope and conditions, any expiration, and your anonymity review. Authorization must cover anonymized use in other utilities' commercial scenarios and proposal appendices. Source verification alone is not reuse permission. Select Preview reusable summary and inspect its source evidence and exact public-facing summary. Confirm review of authorization and identification risks before Release reviewed experience.

In Commercial ROI, open Use verified experience from earlier work. Attach a current reviewed summary to an existing opportunity or add a new opportunity with blank local amounts. Enter the new utility's own affected population, charges, timing and assumptions. Historical measurement does not verify projected recovery, an error incidence rate or a monthly per-account amount. The summary identifies billed or collected amounts, approval and implementation records, the selected population and its limitations. Do not sum billing and collection observations as separate recovery.

Saved estimates retain the exact reviewed experience copy. Linked proposal quotes retain that copy in their review appendix. Private source and authorization notes are excluded. A withdrawn, expired, superseded or changed-source summary is blocked from new estimates and proposal revisions; saved history is preserved and current availability is shown separately. Review a changed source and release a new summary, or remove the unavailable reference before saving new work. Save and release retries preserve their identities after uncertain responses.

Ask CURE can take you to another module and continue your request there. For example, say Open Utility Profile and set annual income to 72000, or, if your role permits it, Open Utility Engagement, set the owner to Dana Example and save. It opens permitted pages and connected forms, carries your supplied values forward and reports the actual result. Watch its progress or choose Stop task. It keeps the selected utility and engagement, asks when a target is unclear, and never discards unsaved work. A save already in progress can still finish after stopping. Unconnected fields, approvals, execution, publication and outbound messages use their page controls.

To prepare a proposal with Ask CURE, name a saved ROI snapshot and published pricing version, provide the scope and line-item values you know, and say save the draft and generate Word and PDF copies. Text and voice use the same connected Contract Builder form. A saved ROI estimate also offers Prepare a proposal with Ask CURE, which opens an editable message with its snapshot ID and sensitivity case. The assistant reports the saved version, missing information and download results. Unknown amounts, dates and terms remain unresolved; linked pricing is not automatically an agreed charge. Exports use that exact saved version and omit the internal appendix. If an export fails or your browser blocks it, use Download Word or Download PDF on the saved draft; do not save another version just to retry. The assistant sees one loaded source page, selected sources, the first 12 existing items and one new service/travel slot per request. Use the page controls for earlier sources or larger edits.