

Grid Data Management Platform

Enterprise meter data management — from AMI reads to certified bills, outage-aware VEE, gas, device commands, and market settlement, at utility scale.

The Grid Data Management Platform (GDMP) is the core of the family: a complete Meter Data Management System. It ingests interval reads, register reads, and events from head-end systems as they stream in; validates, estimates, and acts on them through a configurable VEE engine with weather-aware estimation; keeps master data in step with the utility's systems of record; and serves certified, immutable, auditable data to billing, outage operations, gas operations, market settlement, analytics, and regulators — with a full exception workbench, coordinated device commands, and a standalone operations monitor around it.

Streaming

AMI ingestion at scale

Full-cycle VEE

validate · estimate · act

Electric + gas

one platform, commodity-aware

Billing-grade

certified · immutable · auditable

KEY FEATURES

Streaming ingestion

Interval reads, register reads, and signals stream in continuously — every payload traceable, a dead-letter queue the team can inspect and replay, and full support triage tooling.

VEE engine

Register, interval, cross-channel, and extreme-value validation; weather-aware estimation; and action rules that estimate, flag, open exceptions, notify, or raise service orders.

Exception workbench

A workbench for the exceptions VEE raises: assignment pools and rules, escalation policies, manual override and suppression, bulk resolution, trends, and a map.

Master data sync

Customers, contracts, premises, devices, and channels kept in step with the systems of record — validated, traceable, with full history and audited recovery for anything that failed.

One consistent answer

VEE, Billing, Outage, Gas, dashboards, and APIs all see the same current answer for every meter and every day — no competing versions of the truth.

Billing module

Determinants for energy, demand, TOU, reactive, ratchet, CPP/RTP, and special contracts; certification and cycle close; CIS export with acknowledgments; daily extract; rebill, dispute, and hold; NEM credits; an immutable audit trail; and parallel reconciliation for cutover.

Outage module

Outages as managed records in their own right; outage-aware VEE treatment; holds and automatic reprocessing on restoration; outage-linked exception resolution; PSPS handling; and a command center with map.

Gas commodity

Pressure districts, governed conversion factors, gas-specific derivation and VEE, safety events, unaccounted-for gas, gas billing certification, dashboards, and a library of standard reports.

Coordinated Control Operations Device commands — disconnect, reconnect, on-demand reads, pings — coordinated with assignments, device criticality, request statistics, and billing.	Virtual & unmetered meters Formula-driven virtual meters, submeter and check-meter context, and unmetered supply — the network the utility actually has.
Search & master-data workspace Fast global, master-data, and exception search; analyst inquiry over customers, premises, devices, and attributes with comments, tags, and personalization.	Operations Monitor A standalone, read-only monitoring application: pipeline health, backlog, processing metrics, logs, dashboards, and an alert catalog with drill-down.
Market settlement & rate analysis Companion services for wholesale settlement — zonal load, forecasts, capacity tag sets, LMP, UFE and loss factors, supplier tranches, approvals and submissions — and rate analysis of what interval usage would cost under alternative schedules.	Admin & access control A feature catalog with role-based access and navigation; bill cycles, day types, rate schedules, source systems, device groups, retention, and system configuration — all under single sign-on.
Point-in-time recovery Restore to a precise moment within retention while the live database keeps serving, and verify before switching over from ControlPlane.	Continuous archive Every message received is archived as it arrives — replayable, and a record of exactly what was received and when.

HOW DATA FLOWS THROUGH THE PLATFORM

- Ingest** — head-end systems stream reads and signals in; every payload is captured and traceable, with a dead-letter queue the team can inspect and replay.
- Assemble** — reads are tied to the right customer, premise, device, and channel, kept in step with the systems of record.
- Validate & act** — the VEE engine validates, estimates, and acts; findings become estimates, flags, exceptions, notifications, or service orders, with outage policy applied to affected days.
- Serve** — every downstream consumer reads one consistent, current answer.
- Certify & deliver** — billing determinants are certified and exported to CIS, daily extracts flow, settlement and analytics draw from the same data — every step observable in the Operations Monitor.

WHO WORKS IN IT EVERY DAY

Billing operations	Certified determinants, cycle close, CIS export and acknowledgment, rebill, dispute and hold — with an immutable audit trail.
VEE & exception analysts	The exception workbench: assignment, escalation, override, bulk resolution, trends, and the reason behind every read decision.
Outage & gas operations	The outage command center with PSPS and holds; gas factor status, UAG alerts, safety events, and certification queues.
Market & settlement teams	Wholesale settlement calculations, forecasts, approvals, and submissions; rate analysis against real interval usage.
SRE & support	Operations Monitor, dashboards, alert catalog, runbook-driven playbooks, point-in-time restore, and archive replay.

USE CASES

- **AMI rollout backbone** — collect, validate, and store data from every smart meter as the utility's authoritative meter data repository.
- **Billing-grade data supply** — deliver certified determinants to CIS with every estimate, edit, rebill, and hold auditable — and prove parity against the legacy system before cutover.
- **Outage-aware operations** — treat meter data correctly through outages and PSPS events, reprocess on restoration, and close the exceptions an outage caused in bulk.
- **Multi-commodity utilities** — run electricity and gas on one platform, with commodity-specific derivation, VEE, safety, and billing where it matters.
- **Remote device operations** — coordinate disconnects, reconnects, and on-demand reads on the same governed platform.
- **Retail and wholesale settlement** — settle supplier load against market data from the same certified usage the bills came from.

BETTER TOGETHER

GDMP anchors the family: Grid Data Simulator supplies realistic AMI, SCADA, and CIS data for testing, the Integration Suite connects it to enterprise systems, Enhanced Analytics and Reporting visualize its data, Whisper-Wind is embedded in its workspace, Home Energy Management extends it behind the meter, and the Testing Platform verifies every release against it.