AEIC Load Forecasting Workshop Series

Session 4: Pittsburgh, April 14-15, 2026

In person · Energy Innovation Center, Pittsburgh, Pennsylvania · Workshop Results Report · Version 2, November 2026

One of seven documents in the 2026 series package. Session 0 is the series guide, not a meeting: it carries the outline, the background and how to read these reports.

The Finding

A load forecast rests on five systems of record, owned by five different teams, and the agreement between them is written down almost nowhere.

Asked to map their own data flows, teams produced the same picture independently: assets, SCADA, AMI, customer information and geospatial. Each answers a different question, and none of them is owned by the forecasting group.

So the forecast is the most cross-functional artifact a utility produces and among the least governed. That is not a data quality problem. It is a hand-off problem, and hand-offs are fixable.

What This Session Was

The second in-person convening, and the one that moved the cohort from awareness to infrastructure. Two days: pod report-outs and a business case exercise on day one, then data governance, pipelines, source system ownership and regulatory expectations on day two.

The theme was utility voices leading utility voices. The facilitator's role was to hold the space, not to hold the answers.

Who Was Represented

Twelve practitioners from ten utilities, plus AEIC and the research team from the National Laboratory of the Rockies. Among them:

Utility	In the Room
Ameren	Distribution planning
ComEd	Distribution planning
Con Edison	Distribution planning and analytics strategy
Duquesne Light	System planning leadership, distribution planning, engineering
FirstEnergy	Business and staff analysis
Oncor	Capacity planning

Duquesne Light hosted, was represented from engineer through general manager, and shared distribution planning work with the room. The National Laboratory of the Rockies facilitated the business case and data governance exercises.

What Was Discussed

Day one, Tuesday April 14. Three pod report-outs, each opened to the full room rather than delivered as presentation. A ninety-minute business case exercise facilitated by the National Laboratory of the Rockies, working three frames: quantify the gap, meaning what forecast error actually costs; frame the value, meaning how better forecasts reduce risk; and build the ask, meaning what the funding request looks like. The day closed on large loads, which generated the most energy in the room.

The session also put the published research on the table honestly. Work from EPRI, NERC, the National Laboratory of the Rockies, the DOE Grid Modernization Initiative, LBNL and ESIG was named, alongside the question that mattered more. Is any of it actually reaching the people who need it?

Day two, Wednesday April 15. Theme was from awareness to infrastructure. A seventy-five minute data governance exercise covering five pillars: authoritative system of record, data standards, metadata catalogs, data reconciliation, and data stewardship. Then working sessions on data pipelines, quality assurance and refresh cadence; on source systems, ownership and forecast hand-offs; and on managing regulatory expectations. The day closed with a roundtable naming what would get built before the next convening.

What Came out of It

The April 15 group exercise asked each team to write down, in plain language, how data moves through their own forecasting process. Eight artifacts came back, from typed flow statements to hand-drawn taxonomies. Two of them have outlived the workshop.

The five systems of record. One team drew a taxonomy the whole room recognized immediately.

Source	Role	What It Carries
Assets	System of record	System identity, ratings, settings
SCADA	Real-time operations	Telemetry, status, analogs
AMI	Customer consumption	Usage, energy, demand, power factor
CIS	Customer information	Customer characteristics, premise data
GIS	Asset location	Location, demand premise, load modification

The team flagged an important distinction between substation SCADA and metering. Substation transducer data and customer meter data answer different questions at different time resolutions, and conflating them is one of the faster ways to get a wrong answer confidently.

The four-box framework. A second team drew the simplest and most complete thing the series has produced. Ratings set the ceiling. SCADA and AMI give the baseline shape. CIS and GIS say where the shape needs adjusting. Then you combine them in the right place. Every other flow in the exercise is a more detailed version of those four moves.

Five themes ran through the day. Load forecasting is a team sport, and no artifact came from a single role. The same data wears different hats, with AMI appearing in four separate flows for four different consumers. The loop matters more than any single step, because yesterday's settlement becomes tomorrow's training input. Tools are plural and that

is fine, so the answer is clear interfaces rather than consolidation. Load modifiers are where the future lives, and they have stopped being edge cases.

The full exercise is transcribed as the teams produced it in *AEIC Pittsburgh Group Exercise Recap, April 2026*, which went back to participants as a working artifact for markup.

Discussion and Gaps

Four governance threads came out of the room:

1. Whether the cohort can draft a one-page data governance reference that every flow can point to. 2. What the hand-off contract is for each arrow in those diagrams, meaning the agreement on data quality, refresh cadence and ownership. A few of these exist. Most are tacit. 3. Who is measuring forecast accuracy against settlement, and what that learning loop looks like. 4. A shared glossary, because "load modifier" meant at least three different things around that room.

Three of those four are data framework questions, not forecasting questions. The AEIC Data Framework Working Group had been on the same ground since February with a different room, and had landed on five quality dimensions, a position on ownership, and work on shared vocabulary. Thread four, forecast accuracy against settlement, is the one that is a forecasting question.

The practitioner problems carried forward from March. Data absence rather than data quality for new load drivers, and large load applications overestimated in size and timing, with the forecaster carrying the risk.

Actions and Where They Went

Action from This Session	Status
Transcribe the group exercise and return it to participants for markup	Done. Issued as the Group Exercise Recap
Compile the pod artifacts into a single practitioner reference	Done. Workbook v0 shipped April 24

Where This Feeds the Guide and the Workbook

The April 15 exercise is the source of **How the Work Actually Flows** in the AEIC Load Forecasting Reference Guide, including the five systems of record table, the five themes, and the governance question underneath them. The full transcription is Appendix C of that guide. The **Practitioner Workbook** was compiled directly out of this workshop and shipped to the cohort ten days later.

Knowledge of one is the knowledge of all.

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