Platform release notes and user guide, November 2026

Ilika Geospatial LLC | NJ AI Innovation Challenge (NJEDA, administered by Plug and Play NJ)
Ilika Geospatial platform documentation | Ilika Geospatial | November 15, 2026

## Release notes, November 2026 (90-day release)

| Area | Change | Detail |
|---|---|---|
| **Utility Operations** | Peak load risk flag | Each of the six ranked peak stress windows is checked against the zone utility's time-of-use peak period (PSE&G: weekdays June to September 2 PM to 7 PM; Atlantic City Electric and JCP&L: weekdays 8 AM to 8 PM). Windows inside the period carry the tag 'Peak-rate hours', and 'Peak load risk + peak rate' when the window is also high risk, so the demand response planner sees where weather-driven peak load and peak price coincide. |
| **Residential** | JCP&L time-of-day schedule | Morristown and Toms River now show the Jersey Central Power & Light residential time-of-day schedule (on-peak weekdays 8 AM to 8 PM, off-peak all other hours; indicative 2026 supply prices of about 17.6 and 9.2 cents per kWh) in the rate timeline, the legend and the AI Energy Advisor's combined rate and grid-stress analysis. All seven zones now have a published schedule. |
| **Residential and Utility Operations** | Deep links | A city parameter in the address (for example /dashboards/utility-ops?city=MRS) opens the view on that zone, for links from this guide and from partner material. |
| **Data** | Calibrated 51-member distributions | The daily pipeline now writes the Layer 1 (EMOS) and Layer 2 (station-anchored) calibrated distributions for all 24 cities, including the seven zones, to a live table that the platform data route serves; the Utility Operations bands and the Residential risk timeline read the same calibration parameters. |
| **Data** | Calibrated forecast endpoint | GET /api/calibrated-forecast?city=CODE returns the latest calibrated distribution for a city (per day: raw and calibrated mean and spread, P10/P50/P90, and the 51 members with members=1; a past initialisation with init=YYYY-MM-DD), for desks that integrate the distribution rather than the screens. |

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|---|---|---|
| Data | Station anchoring | Newark, Jersey City, Trenton, Camden and Atlantic City are anchored to their settlement station series (Milestone 2); Morristown and Toms River use the grid calibration until a station series is added for Morristown Municipal and Ocean County airports. |
| Documentation | User guide | Updated below for all three views. |

Live at https://beta.ilikallc.com/dashboards and www.ilikallc.com/dashboards (production deployment of 17 November 2026). Release notes and this guide are published at https://www.ilikallc.com/research/platform-release-notes-2026-11 with a PDF copy.

## Platform user guide (updated November 2026)

### Access

Open https://beta.ilikallc.com/dashboards in any modern browser. No login is required. The landing page presents three cards, one per role-based view; select a card or use the Dashboards menu. Add ?city=CODE to a view's address to open it on a zone (codes: EWR, JCY, TTN, CMD, MRS, TOM, ACY).

### Residential Consumer view

**Purpose.** Help households plan flexible usage, especially EV charging, to avoid the hours when demand risk and the time-of-use price are both high.

- Choose a zone. The list opens with the seven New Jersey zones, then New York City, Philadelphia, Boston, Chicago, Houston and Atlanta.
- Choose Today or Tomorrow.
- Read the 24-hour risk timeline: each hour is classified low, medium or high demand risk from the calibrated temperature forecast and its spread; green hours are the preferred windows for flexible loads.
- Read the utility rate timeline: PSE&G (super off-peak, off-peak, summer weekday peak 2 to 7 PM), Atlantic City Electric (weekday 8 AM to 8 PM peak, summer and winter prices) or JCP&L (weekday 8 AM to 8 PM on-peak). Hours where the peak price and high demand risk coincide are the hours to avoid.
- Ask the AI Energy Advisor. It answers with the zone's forecast, the zone's own rate schedule and the departure from the 30-year normal, and names the critical hours to avoid and the best hours to shift load into.

Guidance is advisory. Prices shown are the published schedules at the time of the release and are indicative; the utility bill governs.

### Utility Planning and Operations view

**Purpose.** Give load forecasters and demand response teams a forward view of weather-driven demand stress with quantified, calibrated uncertainty, and show where it meets the tariff peak.

- Select a zone on the New Jersey service territory map (PSE&G, JCP&L, Atlantic City Electric; Rockland Electric and the municipal systems in grey) or in the zone list. The status line names the zone, the utility, the initialisation shown and the calibration in use.

- Peak stress windows: the six riskiest 6-hour windows of the next 14 days, ranked by temperature departure from 65 F and ensemble spread. Windows inside the utility's time-of-use peak are tagged; a high-risk window inside the peak reads 'Peak load risk + peak rate'.
- Demand stress forecast: the forecast departure from 65 F with the 30-year normal and the calibrated P10 to P90 band, heating and cooling regions shaded; toggle EMOS-calibrated and raw ensemble bands; horizons of 24 hours, 72 hours and 14 days.
- Risk calendar: one card per day with the risk level, the peak uncertainty hour and the spread; expand a day for the reasons (departure from normal, spread, extreme thresholds).
- Action suggestions: demand response watch windows and event preparation, generated from the high and medium risk days.
- Risk sensitivity slider: the spread threshold for classifying hours.

### Utility Trading Desk view

- Settlement distributions for CME temperature contracts, benchmarked daily against market pricing, with a hedge simulator. Unchanged in this release; see the 30-day user guide.

### Data and methods behind the views

| Element | Source |
|---|---|
| **Ensemble** | ECMWF 51-member ensemble (control and 50 perturbed members), 00Z, 6-hourly to day 15, ingested daily at 06:00 ET |
| **Calibration** | Layer 1 EMOS per grid cell and month (mean and spread corrected, fitted by CRPS against ERA5); Layer 2 station correction per station and month for the five zones with a settlement station |
| **Normals** | ERA5 1991 to 2020 daily climatology |
| **Service territories** | NJ Board of Public Utilities electric territory map |
| **Rate schedules** | PSE&G residential time-of-use plan (2025); Atlantic City Electric residential TOU, NJ BPU notice November 2025 to October 2026; JCP&L residential time-of-day (RT) structure with indicative 2026 supply prices |
| **Peak definition** | Utility tariff peak period; weekends excluded for all three utilities |

## Contact

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