

Meeting Summary
Innovation Pilot Framework (IPF)
Quarterly Stakeholder Meeting – December 2025

Date: December 10, 2025

Location: Virtual – Microsoft Teams Meeting

[Meeting Slide Deck](#)

Meeting Takeaways

- **Charge Up eBus** – **Yellow**: Executed three (3) participation agreements with one (1) site starting construction in Q4 2025 and two (2) in permitting.
- **Charge Up Commercial** – **Yellow**: Executed 14 participation agreements and 14 designs. One (1) completed construction and another site with construction underway.
- **EV-J and EV-P tariff** – **Green**: PUC approved request to remove permit closure and charger ID requirement from tariffs on 12/9/25 effective 1/1/26. Continued interest in enrollment with pace limited by the installation of EV charging facilities.
- **Wildfire EFT Reliability Mitigation** – **Green**: PUC conditionally approved Notice of Intent (NOI) with conditions accepted on 10/21/25. Installation/commissioning is expected in Q1 2026.
- **Immersive Learning using Virtual Realty** – New potential pilot with NOI expected to be filed in January 2026.

Active Pilots (latest forecast)

- Approximately \$3.5M and \$2.0M in expenses forecasted for 2025 and 2026, respectively.

In-flight Pilot Updates

Charge-Up eBus

- Infrastructure beyond the meter up to chargers for electric buses.
- Three (3) customer sites: one (1) to start construction in Q4 2025, two (2) pending permit approvals with construction to start in Q1 2026 (Hawaii Island) and Q2 2026 (Oahu).
- Challenges/Risks: Customer procurement, landowner approvals, permitting, supply chain constraints for materials.
- Encountered a site-specific infrastructure issue at site under construction which will require more time to address. This will delay completing construction into next year. Issue discovered when probing site.
- Completed transformer and utility work. Issue identified on the customer side.
- Overall, 70% project completion with final designs for all sites near completion (some revisions left).
- Slightly behind schedule. Depending on permitting and installation of customer charging equipment, data collection may start after 7/1/26.
- Lessons learned could be incorporated for future Make-Ready sites for securing landowner approvals, permitting, and construction (allocate more time to complete and implement critical evaluation of sites).
- Limited opportunities to use template approvals when working with State and County governments

since requirements for the State and County can be different and unique. Each County is also unique.

- New permanent E-Bus rates have been approved by PUC; however, Make-Ready participants can elect to remain on the original E-bus rates for the 10-year commitment period.

Charge-Up Commercial

- Infrastructure beyond the meter up to chargers for commercial EV chargers, Level 2.
- Fourteen (14) customer sites: Four (4) to six (6) charging ports/site for a total of 68 charging ports. Eight (8) customer sites on Oahu and six (6) on Maui.
- Similar challenges as eBus pilot with permitting taking longer than expected.
- Targeted to have all 14 sites commissioned by 3Q 2026, providing at least 6 months of data before the end of the pilot. Data will continue to be collected for 5 years.
- Overall, 68% project completion: one (1) site completed and one (1) under construction on Oahu. Six (6) sites expected to start construction in Q1 2026 – three (3) on Oahu and three (3) on Maui.
- One (1) site operational – workplace charging:
 - 6 chargers
 - Average 30 sessions/month with charging occurring mostly during mid-peak and off-peak periods and none during the priority peak.
 - Average 25 kWh/session.

EV Tariff Pilot Rates (Schedules EV-J and EV-P)

- Time-of-Use EV Charging rates are designed to be competitive with standard combustion fuels and help accelerate the transition to clean transportation and encourage charging behavior to support the grid.
- PUC approved the request to remove permit closure and charger ID number requirement from tariffs on 12/9/25, effective 1/1/26.
- Energy (kWh) usage continues to grow as new accounts come online and existing accounts experience increased EV charging levels.
- Pilot rates expire after 3/17/27, exploring options for a successor rate.
- Data Trends
 - Q4 2025 data is lower since the quarter has not ended. It does not include consumption for December.
 - Most of the usage is during the mid-day period between 9:00 AM and 5:00 PM. Usage during off-peak and on-peak is similar since it is the same rate and there are no pricing incentives to encourage change to charging.
- One (1) new enrollment on EV-P for Maui. A total of 12 for Oahu, Maui, and Hawaii Island.
- One (1) customer enrollment is still open pending permit closure. If not closed by 1/1/26, it will be enrolled in rates due to updated enrollment criteria.
- In discussion with another fast-charging location to encourage enrollment. They could save about 60% on energy costs.
- Separately metered service, time waiting for closure of permits, high infrastructure costs for separately metered service, and uncertainty in EV tariff rates past 2027 continue to be barriers to enrollment.

Wildfire EFT Reliability Mitigation

- PUC conditionally approved NOI with conditions accepted on 10/21/25.
- Mitigate reliability impacts due to Wildfire Safety Strategy (WSS) safety measures like enhanced fast trips and that impact reliability.
 - Utilizing SEL fault detector and transmitter system to be installed on four wildfire circuits where it transitions from high- to low-risk wildfire areas.
 - Allowing implementation of smarter protection schemes to improve reliability and prevent fast trips in low-risk areas.

- Deploy technology and monitor effectiveness through data collection for 6-12 months, then evaluate performance and determine whether to operationalize with further deployment on other circuits.
- Requires integration with SCADA to monitor.
- Potential Issues:
 - Possible radio interference.
 - Need faults to occur in order to evaluate the solution.
 - On-going grid hardening work may reduce the number of faults on pilot circuits.
- Current Work
 - Engineering has started.
 - Procurement in progress with materials expected in January 2026.
 - Bench testing is expected in January 2026.
 - Installation planned for 1Q 2026.
 - Monitoring for 6 months with option to extend for an additional 6 months if there is an insufficient number of events recorded to validate technology.

Innovation Pipeline Framework (IPF) Pipeline Status

- Wildfire EFT Reliability Mitigation moved to Stage 4: Execution.
- Completed projects (Data Analytics and EV Telematics) removed from the pipeline.
- Expect to file a NOI in January 2026 for Immersive Learning pilot.

Next Quarterly IPF Stakeholder Meeting: March 18, 2026