

# Meeting Notes: Bidirectional EV Working Group – Meeting 6 – Draft Recommendations and Working Group Synthesis

Date: June 12, 2026 | Time: 9:00 AM ET

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On June 12, 2026, Customized Energy Solutions (CES) facilitated the sixth meeting of the Bidirectional EV Working Group (Bidirectional EV WG). The meeting was held via Microsoft Teams. This memo summarizes the major topics of discussion, questions, and comments raised by participants.

## 1 Program Administrator Draft Recommendations

The Program Administrators provided their preliminary recommendations for how bidirectional EVs should be incorporated into the Energy Storage Solutions (ESS) program. A representative from the PAs program opened by framing the overall approach as deliberate and phased. Four primary objectives were described as underlying the recommendations: cost-effectiveness, maturity, scale and administrative efficiency, and customer experience.

On cost-effectiveness, the representative noted that any bidirectional EV program expansion must be tied to measurable grid benefits and must pass the cost-benefit screening tools currently applied in the ESS program, including both a ratepayer impact measure and a participant cost test. On maturity, the representative cited the importance of learning from ongoing pilots – including the IES bidirectional pilot and the Mass CEC V2X pilot – before broader scaling, noting that communication standards and metering requirements also need to be sufficiently developed. On scale and administrative efficiency, the representative observed that programs carry costs and that there must be a tangible volume of participating assets to justify those costs. On customer experience, the representative emphasized that EVs are transportation assets first and grid resources second, and that problems with early deployments could delay broader adoption.

### 1.1 Commercial Recommendations

A PA representative presented the following preliminary recommendations for EVSE installed behind meters on commercial rates:

- Eligibility: EVSE installed behind the meter on a commercial utility rate, with a minimum discharge rating of at least 20 kW per port.
- Program participation: at this time, vehicles may enroll in either the light-duty Managed Charging program or the ESS program, but not both simultaneously. The representative noted

that dual enrollment is a goal, but that the technological and operational roadmap for managing simultaneous signals from both programs has not yet been fully worked out.

- Performance incentive: rather than establishing a new vehicle-specific rate, the PAs propose to use an existing approved rate, specifically, the small and medium commercial rate. The current rate is \$325/kW for the first five years, declining to \$175 per kW for years six through ten.
- No enrollment incentive: the PAs do not recommend an enrollment incentive. The representative noted that, relative to stationary storage, the incremental costs associated with moving to a bidirectional-capable EV and EVSE from one-directional is modest.

## 1.2 Residential Recommendations

For residential-connected resources, the PA representative described a recommendation to defer program opening pending the conclusion of current pilots. The IES Bidirectional Energy pilot is expected to conclude within the next twelve months, though a six-month extension has been requested. The Mass CEC V2X pilot, which is also expected to yield applicable learnings, is also ongoing. The representative indicated that, based on the preliminary PA recommendations, the earliest residential vehicles could enter the program, assuming pilot learnings are incorporated, would be the summer of 2028.

Consistent with the commercial recommendations, residential resources would be required to choose between Managed Charging and ESS program participation, pending development of a dual-enrollment pathway. Performance incentives would follow the existing ESS rate structure for Standard, Underserved, and Low Income residential customers. No enrollment incentive was recommended.

## 2 Discussion of Draft Recommendations

A participant asked about the rationale for the 20 kW minimum discharge threshold for commercial EVSE, noting that a fleet of light-duty vehicles using Level 2 chargers rated at 10–12 kW would not qualify. The PA representative explained that the 20 kW threshold is intended to target higher-value, higher-kW systems – noting that certain vehicle types primarily connect at DC fast charging speeds – and that the intent is to avoid overlap with the existing light-duty fleet managed charging program. The representative confirmed that while the threshold is effectively aligned with the current school bus market, it is not intended to be vehicle-class-specific, and that other commercial vehicle types are expected to become eligible as they come to market.

Several participants expressed concern about the residential deferral and urged the PAs to consider an earlier soft launch. One participant noted that major OEM manufacturers are actively planning and launching new bidirectional EV products, and cited a recent announcement by General Motors that a large number of already-sold vehicles could be enabled for grid-parallel bidirectional operation through a software update. The participant urged the PAs to consider beginning a soft launch in 2027 to allow the residential market to begin developing, arguing that an additional year of delay would be harmful to companies bringing these technologies to market.

Another participant, speaking from the perspective of the active residential pilot, described a tension in the market: technology companies need sufficient market certainty before committing to a state program, but scaled programs seeking greater market maturity may not see the volumes they're looking for until a

stable program is announced. The participant noted that a clear commitment to a residential program would help demonstrate to technology partners that the opportunity is durable and not a one-year window.

A third participant, echoed those points and noted that light-duty vehicles are already participating in grid events in other jurisdictions through existing aggregation and DERMS platforms, and that the technology and aggregation infrastructure to enroll light-duty vehicles in ESS is available ahead of the 2027 program season. The participant urged the PAs to push for a 2027 residential launch, and at minimum to ensure that the interconnection work currently underway in the parallel working group is not inadvertently scoped in a way that excludes light-duty vehicles.

CES noted that the PA intent is to provide a clear, committed roadmap with specific milestones that would trigger expanded eligibility – not an open-ended deferral. CES suggested that one of the most useful contributions participants could make, in written follow-up comments, would be to help identify concrete, mutually agreeable milestones that could be used as clear triggers for expanding the program to residential customers. CES also noted that PURA, not the PAs, will make the ultimate determination, and encouraged participants to keep recent PURA decisions and priorities in mind when formulating their recommendations.

A participant raised the concern that deferring residential program opening without any interim mechanism risks a loss of momentum – both for the market and for program design readiness. The participant suggested that rather than waiting passively for pilots to conclude, the PAs consider carving out a modest budget to continue a structured pilot within the ESS program during the upcoming cycle, allowing program design to evolve in parallel with market development.

Another participant, focused on the Medium/Heavy Duty market, offered a different perspective, stating support for the PA recommendation on the commercial side and noting that the proposed compensation structure is within a range sufficient to support investment payback. The participant expressed caution about enrollment incentives, noting that in the current regulatory and political environment, performance-based incentives are more defensible than upfront payments that are not directly tied to grid benefits. The participant clarified that this view was specifically about the commercial segment and did not necessarily apply to residential.

A participant noted that the original ESS program provided upfront enrollment incentives to help stationary storage overcome early adoption barriers, and suggested that V2G technology, while entering a more mature program structure, is itself earlier on the adoption and cost curve than stationary storage was when those incentives were provided. The participant drew an analogy between the declining block incentive structure that benefited early battery adopters and a potential analogous structure for early V2G adopters. CES acknowledged the point and noted the relevant context: the shift away from upfront incentives in the Year 5 Decision was driven by performance concerns, not by technology maturity alone.

A participant asked the PAs to elaborate on the specific barriers to dual enrollment in managed charging and ESS, and what conditions would need to be met for that to become possible. A PA representative explained that the Managed Charging program and the ESS program are managed using different DERMS providers and that there is no established mechanism for a single asset to receive coordinated signals from both systems simultaneously. The primary concern is customer experience: cases where charging does not behave as expected are already a significant source of customer support inquiries in the managed

charging program, and introducing a second program with potentially conflicting signals compounds that risk. The representatives noted that they see dual enrollment as a goal, and that the intended direction is for vehicles to participate in both programs – partly because ESS-only participation could cause vehicles to charge in spikes immediately following a discharge event, which is itself undesirable. The barrier is the technological roadmap to get there.

### 3 Review of Prior Working Group Discussions

CES briefly synthesized the key discussions and areas of consensus and divergence from prior meetings, for the purpose of ensuring those perspectives would be appropriately reflected in the final report.

#### 3.1 Device Enrollment (Meeting 3)

CES noted that the straw proposal – that the EVSE is the unit of enrollment, with the PAs optionally collecting vehicle information for evaluative – received wide support from working group members who submitted written feedback. No substantive objections were raised in the meeting.

#### 3.2 Qualified Product List (Meeting 3)

CES summarized the QPL straw proposal and member feedback. The proposal called for a EVSE-only QPL, not attempting to address interoperability, requiring V2G capability, UL 1741 SB or SC certification, IEEE 1547, UL 9741, UL 2594, and integration with the program administrators' DERMS. Member feedback raised several themes: that IEEE 1547 is likely incorporated by reference into UL 1741 and may not need to be cited independently; and that some members advocated for referencing the EPRI QPL rather than maintaining a program-specific list. In feedback collected by CES, some participants advocated that the QPL should be on the basis of ability to connected to a DERMS as opposed to that connection already being established. CES noted that the QPL is intended to be a customer-facing list of equipment that can be immediately enrolled, and only equipment that has completed DERMS integration can meet that bar.

#### 3.3 UL 1741 Certification Pathways (Meeting 3)

CES summarized the three-pathway framework reflected in the straw proposal: UL 1741 SB for DC-coupled systems; UL 1741 SC (pending finalization) plus SAE J 3072 for AC-coupled systems; and UL 1741 SB CRD for composite DER pairings. No significant objections were raised.

#### 3.4 Communication Protocols (Meeting 3)

CES summarized the straw proposal – ISO 15118-20 as a program requirement with PA discretion to grant exceptions, and Open Charge Point Protocol (OCPP) not required – and noted that this was the topic that generated the most divergent feedback. One participant reiterated that while it supports the goal of interoperability, requiring 15118-20 may exclude equipment that is otherwise capable of participating. A participant expressed support for requiring a DERMS-to-EVSE communication standard as well, not just the EVSE-to-vehicle standard, recommending that OCPP 2.1 should be a program requirement. A participant raised the aggregation layer question – noting that many utilities prefer to work through aggregators rather than direct EVSE connections, which affects how end-to-end standardization should be framed. CES noted that OCPP was omitted primarily because of divergent opinions in provided

feedback and uncertainty about which version would be appropriate and whether older versions address bidirectional functionality; CES invited additional written feedback on OCPP from interested participants.

A PA representative added context on why communication protocol requirements, including EVSE-to-vehicle standards, are within the program's purview: the ESS program has experienced the failure of battery manufacturers and the resulting inability to communicate with orphaned devices. Requiring open standards is intended to protect customers who have enrolled expecting ten years of performance incentives from being stranded if their equipment manufacturer exits the market.

### 3.5 Safety Standards

CES noted that the straw proposal for UL 9741, UL 2205, and UL 2594 as explicit QPL requirements received broad support with no objections.

### 3.6 LD vs. MHD Classification (Meeting 2)

CES noted that the working group reached clear consensus that light-duty versus medium/heavy-duty classification based on a gross vehicle weight rating threshold is not the most operationally useful distinction for program design. Residential versus commercial utility rate class emerged as the more meaningful dividing line, and the PA recommendations reflect that framing. CES noted no significant dissent on this point.

### 3.7 Cross-Program Participation (Meeting 4)

CES summarized that the working group reached consensus that co-participation in managed charging and ESS does not create a benefits double-counting problem from a policy standpoint, but that implementation presents significant practical challenges – including conflicting dispatch signals, baselining complexity for managed charging program evaluation, and the absence of existing integrations between the two programs' technology platforms. The PA recommendations reflect the current position of requiring a choice between programs while working toward a dual-enrollment pathway over time.

### 3.8 Incentive Structure (Meeting 5)

CES noted that Meeting 5 focused on incremental cost drivers and a discussion of incentive design, primarily the question of upfront versus performance-based incentives. Key themes included: significant variability in incremental costs that is expected to narrow over time; the argument that performance-based incentives are more politically durable and directly tied to ratepayer value; and the counterargument that upfront or front-loaded incentives may be necessary to enable early adoption given current equipment cost premiums. CES noted that both perspectives will be reflected in the final report, alongside the PA recommendation for a performance-only structure.

## 4 Report and Process Next Steps

CES described the structure and timeline for the final report. The report will be filed with PURA by August 1, 2026. It will include background on market conditions and other jurisdictions' approaches, a synthesis of the working group discussions identifying areas of consensus and divergence, and the PA-specific recommendations – including both what should be implemented immediately and a roadmap for future program expansion. CES noted that the explicit articulation of a future roadmap is intended to give PURA

an opportunity to weigh in on the PA vision in the Year 6 docket Decision expected in early December 2026, providing market signal clarity that goes beyond the immediate program season.

CES noted that given the number of participants and timeline, the group will not be asked to provide line-by-line edits on the report. Participants will receive a prompt for written feedback on the recommendations discussed in the meeting, and are encouraged to share any perspectives they want captured in the report. CES indicated a turnaround of at least one week would be provided for that feedback.

A participant asked about the proceeding timeline after the report is filed. A PA representative clarified that the ESS docket (Docket No. 26-08-05) has been opened and provided an overview of the schedule. A Final decision is currently scheduled for December 2, 2026.

## 5 Attendee List

An attendee list is provided below. Organizational information was not collected; information collected below is based on CES' best attempt at associating individuals' names with the appropriate organization.

<b>Attendee</b>	<b>Organization</b>
Alex Wang	OCC
Amanda Stevens	Eversource
Amy Findlay	ChargeScape
Anu Kadyan	WRI
Benjamin Noth	DEEP
Brian Morris	UI
Dominic Gatti	Tesla
Ella Roseman	EnergyHub
Emmett Werthmann	WRI
Frances Bell	Bidirectional Energy
Jacqueline Piero	Mobility House
Jennifer Runyon	Eversource
Katie Peterson	Mobility House
Kevin Boughan	Eversource
Kevis Moss	Connecticut Green Bank
Lean Brams	Highland
Lidia Ruppert	DEEP
Logan Taricani	UI
Madeline Frierson	Customized Energy Solutions
Mark Moniz	Eversource
Mark Scully	People's Action for Clean Energy
Michael Crowley	UI
Nachum Sadan	GridEdge Networks
Nikhon Schuler	Eversource
Nitin Satish	Zum

Robert Whelan	UI
Sara Harari	Connecticut Green Bank
Sara Pyne	Connecticut Green Bank
Sergio Carrillo	Connecticut Green Bank
Stephan Wollenburg	CES
Steve Letendre	VGIC (Vehicle Grid Integration Council)
Walter Barozi	DEEP