BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to Modernize the Electric Grid for a High Distribution Energy Resources Future.	Rulemaking 21-06-017

ADVANCED ENERGY UNITED'S OPENING COMMENTS IN RESPONSE TO ASSIGNED COMMISSIONER'S PROPOSAL REGARDING FLEXIBLE SERVICE CONNECTIONS

1. INTRODUCTION AND SUMMARY

Pursuant to the July 7, 2026 Assigned Commissioner's and Administrative Law Judge's Ruling (Ruling), and Administrative Law Judge Regnier's July 10, 2026 emailed ruling granting schedule modifications, Advanced Energy United (United) submits these opening comments on the Assigned Commissioner's Proposal on Flexible Service Connections (Proposal) in Track 3 of R.21-06-017.

United supports and applauds the Proposal's core objective of expanding use of flexible service connections (FSC) to increase speed-to-power for new economically beneficial end-uses, to decrease costs for customers that choose to electrify end-uses, and especially to defer or avoid ratepayer-funded upgrades. We are particularly pleased that the Proposal moves forward persistent and durable FSC, as we recognize these non-bridging solutions as uniquely capable of translating load flexibility into real infrastructure avoidance through the distribution planning process.

We caution, however, that in order to realize the maximum benefits from these solutions, it is critical to maintain accessibility to the solutions and programs contemplated by the Proposal to the robust ecosystem of solution providers. We have some concern that as drafted the Proposal risks concentrating implementation of Grid Edge DERMS and non-firm capacity management in

utility-owned systems and pilots, without specifying pathways for third-party energy management systems and aggregations, and deferring the interoperability, data-access, and competitive-market questions that determine whether third-party aggregators and Grid Edge DERMS vendors can actually compete for this business to a later, unscheduled workshop process.

Additionally, United would urge the Commission to emphasize that these flexible service solutions would benefit residential electrification broadly, beyond just instances where addition of electric vehicle charging equipment potentially triggers an upgrade. United believes it is important for the Commission to emphasize that these solutions are intended for all customers to unlock the benefits of electrification for more Californians by reducing upfront costs and increasing throughput to put downward pressure on rates.

United's comments below are organized, as directed, by the Proposal's own section structure for Question 1, followed by Questions 2 through 9.

2. Question 1: Comments on the Proposal, by Section

a) Section 2: Affordability Opportunity

United agrees with the proposal that "advances in PSC, smart inverter functionality, operational limits, and DER controls provide utilities with new tools… that were not previously feasible" to address grid challenges of increased electrification.[1] The various electrification impact studies in this proceeding show just how critical customer load shapes are to causing costs and, thus, how adopting these approaches and technologies for all types of customers–and incorporating the expectation of using these technologies in grid planning–will help put downward pressure on rates. United urges the Commission to be clear and explicit that opportunities at the residential level are critical to achieving these objectives and should not be overlooked or obscured in favor of other solutions that are more practicable only for larger, more sophisticated customers. Additionally, flexible service connections — both bridging and durable non-bridging offerings — should be available for all new load types facing distribution capacity constraints, including

[1] Proposal at p. 13

residential service upgrades unrelated to EV charging (e.g., panel upgrades, electrification of space and water heating, additions), and should not be implicitly limited to EV-charging use cases.

No matter which electrification measure triggers the need for an upgrade, alternative solutions can provide significant cost savings to the adopting customer as well as the grid and all ratepayers. In a recent analysis by E3 on the use of smart panels to limit load to avoid transformer upgrades, it was shown that utility control and management of these devices could create per device savings of $7,900 to $8,100 for customers, primarily from avoided panel upgrades and time-of-use bill savings, and $3,200 to $10,600 per device in reduced infrastructure costs, driven by avoided distribution system upgrades and deferred service extension costs.[2] Smart panels in residential premises, either alone or in conjunction with other customer-sited DERs, could mitigate a lot of the projected electrification-driven distribution costs and these types of residential applications need to remain in frame as the Commission moves forward with this important work.

b) Section 3: Distribution Capacity Determination

The Mainline/Lateral framework the Proposal substitutes for the "polyphase grid" terminology used in the November 3, 2025 Assigned Commissioner's Ruling is a helpful simplification, and it corresponds helpfully to where power flow modeling and interconnection capacity analysis (ICA) is available.

United's primary feedback regarding this section focuses on the availability of the data generated by ICA and ADMS analysis. United supports moving away from utility-only ICA/ADMS visibility and toward broader data availability, since third-party aggregators cannot design competitive flexible connection or Grid Edge DERMS offerings without access to the same AMI-derived capacity information the IOUs use internally. We agree with the statement in Section 7 that "Information regarding capacity constraints, available flexible capacity, and Operating Envelope requirements should be made available, consistent with existing customer privacy, cybersecurity, and grid reliability requirements."

[2] "Unlocking the Value of Smart Panels"; August 2025; E3; available at https://www.ethree.com/smart-panels/

Further, the Proposal states that IOUs "do not make demand load values available to the customer and that it is unclear whether they are retained."[3] United urges the Commission to go further than requiring disclosure only to the individual customer (addressed in Section 4 Recommendation 2): third-party aggregators and Grid Edge DERMS vendors acting on a customer's behalf, with customer authorization, should have the same right to obtain recorded demand load and secondary conductor capacity values as the customer itself, on the same 30-day timeline. In short, the Proposal is silent on whether, how, and when customers (and their consented agents) would have access to the two sides of the equation determining what loads may be accommodated at a site. This should be explicitly addressed, and customers and solution providers should have access to the data regarding estimated load and hosting capacity.

Another open issue is that the record does not establish a common, Commission-endorsed method for translating AMI interval data into a defensible capacity determination across all three utilities. Without understanding how utilities make these determinations – and having a consistent process across utilities when many customers and solution providers operate in all three territories – customers are limited in their ability to proactively design their facilities to avoid grid impacts. The Proposal should be clarified to require that the Tier 2 FSC Implementation AL include a description of each IOU's AMI-to-capacity methodology so that parties can evaluate consistency.

Lastly, the Proposal's acknowledgment that no Commission- or State-adopted methodology exists to predict the demand-load impact of storage-based DERs (batteries, EVs, water heaters) is an important gap. Given that the Electrification Impact Study (EIS) and the Public Advocates Office's Distribution Grid Electrification Model (DGEM) studies both find that infrastructure costs are highly sensitive to load-shape and peak-demand assumptions,[4] this gap should be treated as a priority research item rather than a background caveat, and the Proposal should recommend a concrete workplan and timeline for developing such a methodology, potentially through the Energy Division workshops already proposed under Section 4.

[3] Proposal at p. 18

[4] For instance, the DGEM finds that mass shifting EV load could reduce distribution grid costs by $5 to $18 billion by 2040. DGEM Study at p. 83

c) Section 4 - Operating Envelopes and Dynamic Capacity Management

The five-tier taxonomy put forward in this section (Limited Power, Static, Variable, Dynamic, and Grid Edge Dynamic Operating Envelopes) is a useful organizing structure. United agrees that Limited Power and Static Operating Envelopes are appropriately low-cost, low-complexity offerings. We support the continued standardization and expansion of these offerings, including the extension of Standard Offer to SDG&E customers included in Recommendation #1.

On Variable Operating Envelopes, the Proposal is candid that costs "run in the tens of thousands of dollars," which will limit uptake to larger, sophisticated Mainline customers. The Proposal should say more about how smaller Lateral and secondary customers will realistically access non-firm capacity if Variable Operating Envelopes remain cost-prohibitive for them, beyond the general statement that a "less computationally intensive method" will be needed.

The Proposal discusses Grid Edge DERMS in some depth in the context of Dynamic Operating Envelopes, and at further depth in the Track 3 All-Party Workshop. The potential for using either or both AMI 2.0 meters (including using early deployment of single meters in a “spoke” configuration) and aggregated DERs communicating through cloud aggregation to estimate service transformer and other infrastructure loading and provide real-time load management appears significant – and appears to satisfy the “less computationally intensive method” mentioned in the Proposal. It is not clear why this option is not discussed in the context of Variable Operating Envelopes.

Third-party aggregators exist precisely to lower this cost barrier of integrating to Enterprise DERMS by aggregating many smaller customers behind a single interconnection to utility systems. The Commission should direct that IOUs' Enterprise DERMS interoperability testing and onboarding processes for Variable and Dynamic Operating Envelopes be open to certified aggregators (not only individual customers or their own equipment vendors) as a matter of course, not as an exception.

United understands that this opportunity is one of the motivating influences for the present Proposal. SCE and Enphase agreed on this record[5] that, particularly for smaller customers, the most cost-effective architecture is cloud-to-cloud communication between the IOU's DERMS and a third-party aggregator's cloud server, with the aggregator handling further downstream messaging to individual sites, rather than direct site-by-site connections to the IOU's DERMS. Enphase specifically ties this to PG&E's own acknowledgment of the high cost of extending its DERMS to individual single-phase customers.

United agrees, and submits that this aggregator-mediated, cloud-to-cloud model — not direct customer-by-customer enrollment in utility Enterprise DERMS — should be the default architecture the Commission directs IOUs to build toward for Variable and Dynamic Operating Envelopes, with aggregator access to the IOU DERMS cloud interface treated as a first-class onboarding path rather than a workaround. Both OEMs and Grid Edge DERMs providers have existing integrations with a wide array of responsive devices that provide both visibility and dispatchability to the utility in the Enterprise DERMS.

Utilities inside and outside California have ongoing operating experience confirming that this aggregator-mediated, cloud-to-cloud architecture works at scale today, without requiring direct integration into the utility's Enterprise DERMS. PG&E's Seasonal Aggregation of Versatile Energy (SAVE) program, launched March 2025, dispatches roughly 1,500 residential batteries and 400 smart electric panels across constrained neighborhoods by sending participating aggregators — Sunrun and SPAN — week-ahead hourly signals indicating PG&E's capacity needs by day, time, and duration, plus daily adjustments. PG&E does not manage the underlying customer devices directly. SPAN instead uses its own proprietary Dynamic Service Rating capability to translate PG&E's grid-need signal into panel-level appliance management, keeping aggregate customer usage within PG&E's specified operating limits, while Sunrun separately manages battery

[5] Southern California Edison Company's (U 338-E) Comments on Assigned Commissioner's Ruling on Flexible Connections; R.21-06-017; November 25, 2025; at p. 9
Comments of Enphase Energy on Assigned Commissioner's Ruling Seeking Additional Information on DER Enabled Near Term Flexible Connections; R.21-06-017; December 19, 2025; at p. 2

dispatch using Tesla's grid services platform and Lunar Energy's Gridshare forecasting software for non-Tesla batteries.

Additionally, Southern California Edison's Behind the Meter Optimization of Load Technology Study (BOLTs) builds upon the SAVE program by orchestrating multiple types of DERs including home batteries, thermostats and EVs. BOLTs provides another proof point that direct integration into the utility's enterprise DERMS is unnecessary for reliable asset performance and management. Rather, a third party -- Demand Side Analytics -- is orchestrating the DERs, while Sunrun dispatches 1,250 enrolled customer batteries and EnergyHub will coordinate participating thermostats and electric vehicles. As another example, ConnectedSolutions in the Northeast has this year expanded to ConnectedSolutions+ (in Eversource and National Grid territories) to provide distribution system value with locationally specific visibility and dispatchability provided via a third-party Grid Edge DERMS provider.

United submits that SAVE, BOLTs, and ConnectedSolutions+ are direct evidence undercutting any suggestion that reliable grid-constraint management requires direct utility Enterprise DERMS integration with customer-owned or third-party devices. United recommends the Commission cite these programs as proof points in directing IOUs toward the aggregator-mediated, cloud-to-cloud model discussed above for Variable and Dynamic Operating Envelopes, and require that any Enterprise DERMS interoperability testing and onboarding process treat this architecture — DERMS-to-aggregator, aggregator-to-device — as a fully supported, first-class pathway rather than a workaround requiring case-by-case accommodation.

More broadly, we emphasize that any communication protocol or other integration requirements be based on open, published standards and be consistent between utilities. United' members that build Grid Edge DERMS and aggregation platforms (including companies providing demand-side management, EV charge management, and behind-the-meter control) should not be required to interconnect through a utility-proprietary architecture in order to help a customer access non-firm capacity. We recommend the Commission require SCE's and SDG&E's forthcoming Flex Connect offerings, directed under Section 4 Recommendation 2, to be built on PG&E's same open-

protocol foundation rather than a proprietary alternative. United further recommends the Commission direct that any Grid Edge DERMS offering adopted under this Proposal, including ChargeBoost-derived offerings at SCE and SDG&E, be built on open, non-proprietary, published protocols consistent with the Flex Connect model, so that qualified third-party aggregators and technology vendors can participate as an alternative to, not merely a downstream customer of, the utility's own platform.

It is important to recognize that in this recommendation, we are not proposing that all flexible *devices* be required to adhere to strict communication protocols. Given the legacy device fleet, this is likely not practical, nor potentially cost-effective for some classes of devices in the future. However, DER aggregators and Grid Edge DERMS providers have already invested in integrations with most devices and can provide standardized communication protocols. Thus, in recommending open, published communications standards and protocols, we recommend it is applicable to aggregators and Grid Edge DERMS providers, not strictly to individual devices.

d) Section 5 – Cybersecurity Considerations

United supports anchoring baseline cybersecurity requirements in the SIO-CS phased, IEEE 1547.3-based framework. We caution, however, that cybersecurity certification and interoperability testing requirements have, in other contexts, been used by incumbent utility systems to slow-walk or add cost to third-party vendor qualification. The Commission should direct that the SIO-CS implementation workshop proposed in Section 5 explicitly address a standardized, utility-neutral certification and testing pathway so that a Grid Edge DERMS vendor or aggregator need not separately qualify with each of the three large IOUs under different procedures.

e) Section 6 – Bridging and Non-Bridging Approaches

United strongly supports expanding durable non-bridging solutions, which the Proposal correctly identifies as offering the greatest ratepayer benefit because they can avoid capital expenditure entirely. Durable non-bridging FSC is the most robust way to translate load flexibility into distribution infrastructure investment avoidance, because the reduced load can be accurately and safely reflected in both the CEC's load forecasting and in utility distribution upgrade planning.

SCE's July 14, 2026 response to the Ruling's Section 3 questions on Grid-Edge DERMS efforts states that “SCE considers FSCs to be a short-term solution, which may be in contrast to how they are framed in the Assigned Commissioner’s Proposal.” United disagrees, and notes this view is contradicted by a broad and growing body of party support in the existing Track 3 record for durable, non-bridging flexible connections. The Commission's own November 3, 2025 Ruling framed durability as a live question, expressly requesting party comment on the “potential for flexible connections to be used as a long-term solution, in addition to a bridging solution, without customer compensation.” Parties spanning consumer, environmental, and technology-provider interests have already answered that question in the affirmative. IREC states that “non-bridging flexible connections are a promising tool to avoid or defer upgrades for single-phase customers,” and separately observes that transparency and consistency in publicly-defined non-bridging programs increases the likelihood that customers will use them and that developers will offer compatible systems and configurations. The Public Advocates Office (Cal Advocates) recommends the Commission direct the IOUs to offer single-phase customers the option to adopt non-bridging FSCs with static operating envelopes early in the energization process, in order to “maximize utilization of existing grid infrastructure and defer grid upgrades.” EDF's December 19, 2025 opening comments concluded that indefinite FSC agreements “can be well-suited for single phase customers who are willing to remain on constrained capacity limits permanently” and “can provide meaningful certainty for both utilities and customers, optimize the use of existing assets, and help support a more efficient and adaptable grid.”

However, to realize this potential, the existing ecosystem of solution providers should be facilitated to participate. United is concerned that the Proposal's discussion of durable non-bridging solutions focuses almost entirely on customer-owned equipment, without addressing the role third-party aggregators or technical service providers can play in assembling and operating the energy storage, thermal storage, managed EV charging, or other flexible load resources that make a durable non-bridging solution possible. United recommends the Tier 2 Non-Bridging Solutions AL explicitly recognize aggregator-assembled portfolios of customer flexibility (rather than only single-customer, utility-controlled equipment) as an eligible means of satisfying a durable non-bridging arrangement, consistent with the flexibility already contemplated for the WDAT As-Available Capacity Pilot.

f) Section 7 – Competition and Market Access Considerations

This is the section of greatest concern to United. The Proposal is correct in identifying critical principles and objectives – including customer choice, competition, and open-access – and foundational tools, like data access. We wholeheartedly agree with these objectives and suggest that they are important enough to warrant more explicit guardrails and direction now.

Instead, the only recommendation resulting from this section is to direct a future Energy Division workshop, without adopting any interim or default rule. United submits that the record built over the past year of Track 3 workshops is already sufficient to support baseline open access rules now, rather than deferring the question through another full workshop-and-report cycle while Grid Edge DERMS and non-bridging offerings are simultaneously being scaled under Sections 4 and 6. Deferring market-access rules while scaling utility-operated Grid Edge DERMS pilots risks entrenching utility-proprietary architectures as the de facto standard before competitive alternatives can be evaluated.

g) Section 8 – Real-Time Pricing and Economic Signals

United does not support default RTP enrollment for Variable and Dynamic Operating Envelope customers. While we note that third-party aggregators are well positioned to help customers respond to RTP signals through automated dispatch of storage and managed charging, we also note that customers may be reluctant to embrace RTP for a wide range of reasons. It would be unfortunate if customer hesitancy to adopt RTP were to become a barrier to the wholly unrelated positive benefits of FSC. Therefore we strongly recommend that RTP enrollment remain optional. We also recommend that the RTP data-tracking fields proposed by the Commission include a field identifying whether the customer is enrolled through a utility program, a CCA, or a third-party aggregator, so that the Commission can evaluate whether RTP responsiveness differs by service-provider type.

3. Question 2: Feedback on Section 9 Recommendations

United's feedback on individual recommendations tracks the concerns above. In particular:

a) Section 3 Recommendations (Distribution Capacity Determination)

- Recommendation 1 (Extension of Standard Offer to SDG&E): United strongly supports this recommendation as closing a known regulatory gap and extending a proven bridging framework to a third IOU. Customers in SDG&E territory should not need to wait for there to be documented delays in energization to have the option of a feasible and low-cost bridging solution – waiting until a customer is inordinately inconvenienced is to wait too long.
- Recommendation 2 (IOUs to record and provide demand load and secondary conductor values to dedicated infrastructure customers within 30 days): United supports this recommendation, which moves the Commission away from utility-only visibility into these values, consistent with United's comments on Section 3 above. However, as drafted, the right to obtain these values runs only to "the customer," not to a third-party aggregator or Grid Edge DERMS vendor acting with the customer's authorization. We recommend the Commission extend the same 30-day right to authorized third parties.
- Recommendation 3 (Rule 2 Controlled Load definition and IOU alignment, including citing IEEE 519 and removing gendered language): United supports this technical harmonization, which will make it easier for a single PCS or Grid Edge DERMS product to operate consistently across all three large IOUs.
- Recommendation 4 (Flexible connection evaluation required before a ratepayer-funded upgrade): Requiring IOUs to evaluate Limited Power, an Operating Envelope, or another PCS-enabled mitigation before initiating an upgrade directly advances the Proposal's affordability goal and is critical for customer understanding and customer choice, and creates a natural checkpoint at which aggregator-supplied solutions can be considered. The implementing AL should make clear that eligible PCS-enabled mitigations, and their communication to customers, include third-party-supplied and aggregator-managed devices, not only utility- or OEM-supplied equipment, consistent with United's recommendations in Question 8, below.

b) Section 4 Recommendations (Operating Envelopes and Dynamic Capacity Management)

- Recommendation 1 (Limited Power as default mitigation for distribution transformer upgrades, using certified UL 3141 devices): United supports this recommendation and we

agree that Limited Power is an appropriately low-cost, low-complexity offering, and that making it a default mitigation should meaningfully increase uptake, resulting in customer and ratepayer savings. However, we flag one potential conflict or confusion between this and Section 4, Recommendation 4. That recommendation proposes that SCE and SDG&E implement Grid Edge DERMS solutions as the default mitigation for residential customers whose EV charging would normally require an upgrade. The Commission should clarify which should be the default, and should likely use some form of cost-effectiveness evaluation to do so.

- Recommendation 2 (SCE and SDG&E to implement Variable Operating Envelope bridging solutions modeled on PG&E's Flex Connect, via Tier 3 Flex Connect AL): United member companies have had positive experience with PG&E's Flex Connect program and believe it is ready and appropriate as a model for adoption by SCE and SDG&E. We emphasize that the Commission must require consistent open communication protocols (IEEE 2030.5/CSIP and SunSpec certification). Further, we suggest that the Commission order the utilities to consider utilizing a single, or at least consistent, interoperability testing and certification procedure. If PG&E, SCE, and SDG&E each impose their own utility-specific testing layer, a vendor seeking to operate across all three IOU territories could face three redundant qualification processes despite a shared open-standard foundation. If the utilities determine they cannot use a single, or consistent, testing procedure they should state the reasons why not in their Advice Letter filing.
- Recommendation 3 (Workshop on leveraging Enterprise DERMS Variable Operating Envelope infrastructure for centralized Dynamic Operating Envelopes to address abnormal grid conditions): Given the mixed party interest the Proposal itself describes, deferring this resource-intensive build to a workshop is a reasonable use of Commission and stakeholder time. We further note that the potential for this use case may be better explored in the technology- or customer-specific proceedings.
- Recommendation 4 (SCE and SDG&E to implement Grid Edge DERMS for 100A residential EV customers, modeled on PG&E's ChargeBoost, via Tier 2 Grid Edge DERMS AL): United is excited and optimistic by the opportunity offered by Grid Edge DERMS-based FSC. However, we are concerned that the conception of Grid Edge DERMS-enabled FSC as put forward in

the Proposal is limited to AMI 2.0-based solutions, and therefore we recommend expanding the definitions and pathways before implementation.

As detailed in our comments above, Grid Edge DERMS may be implemented by a number of technologies - including AMI 2.0 as the Proposal discusses, or through cloud-based aggregators linking detailed customer- and site-level controls and device-level data with the utility Enterprise DERMS. Any proposal to expand Grid Edge DERMS-enabled FSC should be inclusive of these several models and technologies. Further, as noted in response to Section 4 Recommendation 1 above, there is potential conflict or confusion between the recommendation to make this solution the default mitigation versus Limited Power. We recommend the Commission consider some form of relative cost-effectiveness analysis before determining which should be a default option.

- Recommendation 5 (Energy Division-led workshops to further develop Grid Edge DERMS solutions, including capacity sharing, application authoring and program access for CCAs, whether AMI meters are the appropriate long-term solution, and enabling local control of devices beyond EV chargers): While United supports examining these topics, deferring these questions entirely to a future workshop while Recommendation 4 scales the ChargeBoost-model deployments risks entrenching a proprietary architecture before the workshop concludes. United recommends interim non-discrimination requirements apply in the meantime (see Question 8, below).

c) Section 5 Recommendations (Cybersecurity Considerations)

- Recommendation 1 (IOUs to propose implementation of SIO-CS baseline cybersecurity requirements via workshop and Tier 2/3 Cybersecurity Implementation AL): United supports anchoring baseline cybersecurity requirements in the SIO-CS phased, IEEE 1547.3-based framework, however United cautions that cybersecurity certification and interoperability testing requirements have, in other contexts, been used by incumbent utility systems to slow-walk or add cost to third-party vendor qualification; the Commission should direct that the resulting workshop and AL explicitly address a standardized, utility-neutral certification and testing pathway so that a vendor need not separately qualify with each of the three large IOUs under different procedures.

d) Section 6 Recommendations (Bridging and Non-Bridging Approaches)

- Recommendation 1 (PG&E and SCE to each establish durable non-bridging versions of their flexible service connection offerings, via joint Tier 2 Non-Bridging Solutions AL): United supports this proposal, though we note that the required joint AL should explicitly address aggregator-assembled flexibility portfolios.
- Recommendation 2 (Clarification that current Static and Variable Operating Envelope customers may elect to transition from a bridging to a persistent non-bridging solution, via Tier 2 FSC Implementation AL): United strongly supports this proposal. Persistent non-bridging solutions reduce ratepayer and customer costs and allow for more optimized grid planning, as upgrades naturally encompass a greater span of time and/or number of customer load increases before an upgrade is constructed.
- Recommendation 3 (PG&E to formalize its Flex Connect offering and expand its non-bridging Flex Connect generation option to load customers, via Tier 2 Non-Bridging Solutions AL): United strongly supports extending Flex Connect's proven, open IEEE 2030.5/CSIP architecture to non-bridging load customers, and supports tariffing the offering for the transparency required by Public Utilities Code Section 489(a).
- Recommendation 4 (Large IOUs to implement a non-bridging version of the Standard Offer, using UL 3141 certified controls and a 10-year duration, via Tier 2 Non-Bridging Solutions AL): United supports this recommendation, including the certified-controls requirement and the defined 10-year duration, which provide useful design certainty for aggregators and vendors building durable-offering products. As with Recommendation 1 above, we recommend the AL explicitly permitting third-party aggregator and vendor participation, not only utility-controlled equipment.

e) Section 7 Recommendations (Competition and Market Access Considerations)

- Recommendation 1 (Energy Division-led workshop on interoperability and customer choice guardrails): As described above, we appreciate the Assigned Commissioner and ALJ recognize the importance of these issues. However, as the sole recommendation on this topic, it is not commensurate with the scale and complexity of the topics. Further, a report filed in “any

successor proceeding to High DER" is almost definitionally unlikely to be implementable in actionable tandem with any of the other recommendations made in this Proposal. United suggests instead that the timing of at least one workshop should be accelerated to occur prior to the relevant AL filing deadlines so that the discussions and conclusions therefrom may inform the utilities' preparations, and Energy Division consideration, of those filings.

f) Section 8 Recommendations (Real-Time Pricing and Economic Signals)

- Recommendation 1 (Default RTP rate enrollment, with opt-out, for Variable and Dynamic Operating Envelope customers): United supports default RTP enrollment for these customers, and notes that third-party aggregators are well positioned to help customers respond to RTP signals through automated dispatch of storage and managed charging. However, we also emphasize that though default, RTP should not be mandatory or required, so that RTP enrollment not become a barrier to FSC adoption for customers who – for whatever reason – do not wish to enroll in RTP.
- Recommendation 2 (RTP enrollment and opt-out data tracking, via Tier 2 FSC Implementation AL): United supports the proposed data tracking fields, and recommends the tracked fields also include whether the customer is enrolled through a utility program, a CCA, or a third-party aggregator, so the Commission can evaluate whether RTP responsiveness differs by service-provider type.

4. Question 3: Additional Recommendations in Support of the Proposal's Goal

To ensure a competitive market for flexible connection services and to accelerate the ratepayer savings the Proposal is premised on, United recommends the following additional Commission actions:

- Require that Enterprise DERMS operational data needed to support a customer's or aggregator's participation in a Variable or Dynamic Operating Envelope be made available to certified third-party aggregators and CCAs on the same basis, timeline, and cost as it is made available to utility-affiliated programs.

- Require utilities to utilize a single, common, cross-utility certification and interoperability testing process for Grid Edge DERMS vendors and aggregators, so that a vendor qualified with one large IOU is not required to repeat a materially similar qualification process with each of the other two.
- Require that the Tier 2 Grid Edge DERMS AL and Tier 2 Non-Bridging Solutions AL each include a specific customer communication language and participation pathways for third-party aggregators and technology vendors, rather than describing only a utility-operated program.
- Confirm that flexible service connections — both bridging and durable non-bridging offerings — are available for all new load types facing distribution capacity constraints, including residential service upgrades unrelated to EV charging (e.g., panel upgrades, electrification of space and water heating, additions), and are not implicitly limited to EV-charging use cases. The Commission's own August 11, 2023 Amended Scoping Memo defines “Flexible Grid Connections” to include “both Load Specific Flexible Connections and Generation Specific Flexible Connections,” and D.26-02-025 establishes the Standard Offer's use case in equally general terms, making it available to “both new customers seeking service and existing customers seeking to expand their capacity.” Neither definition is EV-specific. However, PG&E's own July 14, 2026 response to this Ruling's Section 3 questions discloses that its Grid Edge DERMS technology-partner workshops and collaboration to date — the practical foundation for its Flex Connect and ChargeBoost efforts — have been almost entirely focused on EV charger integration (e.g., Smart Meter EV Charger Protocols, EV Connect Workshop materials, Meter/EVSE Integration Design). United is concerned that this history of EV-centric implementation could, in practice, narrow the scope of flexible connections below what the Proposal's own technology-neutral definitions contemplate. UNited recommends the Commission expressly confirm in any resulting decision that FSCs, Operating Envelopes, and durable non-bridging solutions apply equally to all new load types — residential and commercial, EV and non-EV alike — and direct the IOUs to report Standard Offer and Grid Edge DERMS enrollment data by load type so the Commission can monitor

whether EV charging is disproportionately capturing an offering intended to be available to all constrained customers.

5. **Question 4: Additional Advice Letter Elements and Consolidation**

United recommends the following additions to the Advice Letters the Proposal already contemplates:

- Tier 2 Grid Edge DERMS AL: require each IOU to identify, for its ChargeBoost-like offering, what components of the architecture (metering, communications, control logic) are utility-proprietary versus built on open standards, and to describe a pathway for third-party vendors to provide functionally equivalent Grid Edge DERMS services.
- Tier 3 Flex Connect AL (SCE and SDG&E): PG&E's existing Flex Connect Technical Requirements for Telemetry and Control procedure shows the level of technical specificity a comparable implementation plan should contain. United recommends the Commission require SCE's and SDG&E's Flex Connect ALs to specify consistent parameters and values (to the extent possible) at the same level of detail as PG&E's. Requiring comparable specificity across all three IOUs will let a single aggregator platform serve customers in all three territories with minimal reconfiguration.
- Tier 2 Non-Bridging Solutions AL: require IOUs to describe how a customer may satisfy a durable non-bridging arrangement using a third-party aggregator's assembled portfolio of resources, in addition to single-customer, utility-controlled equipment.
- Tier 2 FSC Implementation AL: require a single point of contact and defined process for third-party aggregators (not just individual customers) to request recorded capacity and demand load values under Section 3 Recommendation 2.
- Consolidation: because interoperability, data access, and vendor qualification questions cut across the Grid Edge DERMS AL, the Non-Bridging Solutions AL, and the Section 7 workshop, United recommends the Commission direct that these three items be developed on a coordinated timeline with a shared record, so that inconsistent outcomes do not emerge across parallel filings.

6. **Question 5: Measuring, Tracking, and Reporting Cost and Benefit Metrics**

United recommends that in addition to the capital-deferral and utilization metrics generally applicable to all flexible connection offerings, the IOUs track and report, by service-provider type (utility program, CCA, or third-party aggregator/vendor):

- Number of customers served and aggregate non-firm capacity enabled, by service-provider type.
- Any interconnection, certification, or interoperability testing costs and timelines experienced by third-party aggregators and vendors, to allow the Commission to identify whether utility processes are creating disproportionate barriers to entry.
- Further, it is important to have cost benchmarks for types of grid assets and labor costs avoided to ensure the evaluation of these alternatives occurs within a zone of reasonable cost assumptions.

7. **Question 6: Timely Communications with the California Energy Commission**

United agrees that bridging, non-bridging, and transition status should be reported to the CEC on a schedule aligned with CEC forecasting cycles so that load impacts may be included in the IEPR load forecast. United recommends that this reporting identify, for each flexible connection agreement, whether it is administered by a utility program, a CCA, or a third-party aggregator, so that the CEC's forecasting can account for the increasing role non-utility service providers are expected to play in delivering these solutions.

8. **Question 7: Modifications for SDG&E's Implementation of D. 26-02-025 Requirements.**

United recommends that, as SDG&E stands up its Standard Offer, the Commission require SDG&E's implementation plan to explicitly address third-party aggregator and vendor participation from the outset, rather than replicating a PG&E/SCE framework that was developed without this same access requirement. Building competitive access into SDG&E's Standard Offer from day one is

more administratively efficient than retrofitting it later, and would allow SDG&E's implementation to serve as a model for updating the existing PG&E and SCE Standard Offers.

9. **Question 8: Hardware, Software, and Data-Sharing Safeguards**

United recognizes this is an important question.

The record already shows two concrete concerns: the fact that utility Enterprise DERMS operational data may be available to utility programs but not to other qualified market participants, as well as OEM control over customer-owned devices that can be used to charge third parties for access.

However, we note that these concerns are of fundamentally different nature, and address substantially different legal and economic regimes. Specifically, utility DERMS data are generated from ratepayer-funded infrastructure by an entity that is directly regulated by the Commission. OEM devices on the other hand are owned by private individuals, and access is managed under contractual terms with private companies, neither of which categories of entities are subject to Commission jurisdiction.

United does not believe the Commission should cap, eliminate, or otherwise directly regulate the fees an OEM or device manufacturer charges for access to its own proprietary platform or telematics data. That commercial relationship is between the OEM and its customers, and OEMs are generally not subject to the Commission's jurisdiction as public utilities. United is not aware of any Commission precedent that has attempted to reach an OEM's own fees, whether directly or indirectly as a condition of participation in a Commission-authorized program. Consistent with this unbroken practice, the safeguard United recommends below is directed at the IOU's own conduct — prohibiting a utility from entering into an exclusive arrangement with a single OEM or vendor for a control pathway needed to implement a flexible connection — and is not directed at an OEM's freedom to set its own fees for customers who choose to use its proprietary platform outside of that utility-controlled pathway.

A third, more granular barrier is now documented in PG&E's own Technical Requirements for Telemetry and Control procedure for Flex Connect: beyond independent CSIP certification through SunSpec Alliance (which itself carries a membership fee, approved lab testing cost, a device

certificate/PKI service, and optional testing toolkit and training costs), an approved aggregator 'must pass PG&E's interoperability testing for telemetry to verify proper implementation' before it may participate. That utility-specific layer, even where the underlying protocol is open, is exactly the kind of cost and delay that CalCCA's comments describe as a barrier to DERMS vendors, system integrators, and CCAs. United recommends the Commission adopt the following safeguards, rather than deferring them entirely to the Section 7 workshop:

- Prohibit exclusive-access or exclusive-fee arrangements between an IOU and a single OEM or vendor for any control pathway needed to implement a flexible connection, and require that comparable access be offered to qualified third-party aggregators on non-discriminatory terms.
- Require that utility Enterprise DERMS platforms make available, to certified third-party aggregators and CCAs, the same operational and forecast capacity information made available to utility-affiliated programs, subject to the SIO-CS cybersecurity framework.
- Establish a single, cross-utility vendor certification and interoperability testing pathway administered with Energy Division oversight, so that a vendor's independent CSIP/SunSpec certification, together with one round of interoperability testing, is portable across PG&E, SCE, and SDG&E, rather than requiring a separate utility-specific interoperability test with each IOU as PG&E's current Flex Connect procedure requires.
- Require each IOU to publish its utility-specific interoperability testing requirements (scope, cost, and expected duration) in its Tier 2/3 Advice Letter, so the Commission and parties can evaluate whether utility-specific testing layered on top of independent certification is proportionate or is functioning as a de facto barrier to entry.
- Guarantee that a customer may switch control providers — utility, OEM, aggregator, or self-managed equipment — without losing an already-established flexible connection status, to prevent proprietary architecture from becoming a de facto switching cost.

10. Conclusion

United appreciates the opportunity to comment and supports the Proposal's overall direction toward greater use of flexible connections to reduce ratepayer costs. United urges the Commission to strengthen the Proposal's competition and market-access provisions now, rather than deferring them to a later workshop, so that the ratepayer and customer benefits of flexible connections are realized through a competitive market that includes third-party DER aggregators and Grid Edge DERMS vendors on equal footing with utility-operated programs.

Respectfully Submitted July 27, 2026

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