

Comments on CPUC AB 3264 Concept Paper: Working Concepts in Transmission Financing and Ownership

Submitted by:

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I. Introduction

LSA and SEIA appreciate the California Public Utilities Commission’s (“Commission”) leadership in developing this Concept Paper and its focus on strategies to reduce the cost of expanding California’s transmission system. As representatives of developers with significant clean energy investments dependent on timely transmission upgrades, we strongly support the Commission’s effort to identify actionable reforms that lower costs for ratepayers while accelerating the infrastructure needed to meet California’s climate and reliability goals.

Across all ownership and financing models, one theme is clear: the most powerful driver of cost savings is speed. Transmission delays, more than capital structure, are the dominant source of cost escalation. We encourage the Commission to center this reality in the final report and to prioritize reforms that reduce permitting, procurement, and construction timelines.

Moreover, on behalf of SEIA, whose members include developers of solar and storage at all scales, these comments include a final section discussing policy issues related to reducing transmission costs through deployment of distributed energy resources (DERs) – non-wires alternatives – that meet customers’ growing clean energy demand without the need for new transmission.

II. Speed Is the Primary Driver of Cost Savings

The Concept Paper correctly notes that delays significantly increase project costs through compounding Allowance for Funds Used During Construction (“AFUDC”), extended overhead, and exposure to supply chain volatility. Regardless of whether a project is IOU-owned, publicly financed, competitively bid, or subscriber-funded, time is a critical variable that directly impacts total cost to ratepayers.

We recommend that the final report explicitly quantify the cost impacts of delay, including:

- AFUDC accumulation per year of delay
- Cost escalation for long-lead-time equipment (e.g., transformers, reactors)
- Inflationary impacts on labor and materials
- Ratepayer impacts of delayed resource delivery, including increased reliance on higher cost generation
- Higher generation costs resulting from transmission delay and uncertainty

This quantification will help the Legislature and stakeholders understand the cost-reduction impact of accelerating timelines.

Moreover, while LSA and SEIA generally support exploring all the financing options discussed in the Concept Paper – competitive procurement, public financing, public ownership, and public/private partnerships - we emphasize the importance of ensuring that the use of an innovative approach to financing or ownership does not lengthen the timeline for project development. Choices for procurement, financing, and ownership need to be established in the early stages of project development, so that these choices do not lengthen the critical path for project development.

III. Conditional or Phased Approval to Enable Early Work and Reduce Long-Run Costs

SEIA and LSA encourage the Commission to explore conditional or phased approval mechanisms that allow transmission developers to begin lower-cost preliminary work before the full planning process is complete. This approach, previously raised by LSA and SEIA in the IRP proceeding¹, would function as a practical “transmission insurance policy” that reduces long-term costs by addressing uncertainty early rather than allowing it to compound into multi-year delays.

Under this framework, the Commission and the California Independent System Operator (“CAISO”) could establish a process, consistent with the CAISO tariff, that allows CAISO to conditionally approve transmission upgrades based on the highest projected resource buildout levels. Developers could then undertake early stage activities such as routing studies, environmental surveys, and procurement of long-lead-time equipment. At the

¹ *Reply Comments of the Solar Energy Industries Association and Large-Scale Solar Association on the Ruling Seeking Comments on Electricity Portfolios for 2026-2027 Transmission Planning Process and Need for Additional Reliability Procurement*, pp. 4, 5.

same time, the Commission and the CAISO would define clear offramps at key milestones, enabling reevaluation of project need before major financial commitments are made.

Although this type of insurance policy is not cost free, it represents a low-cost, high-value strategy for managing portfolio uncertainty. It ensures that more projects reach a state of readiness, reducing the risk of late stage surprises that drive significant cost escalation. By enabling early progress and structured reevaluation, conditional approval mechanisms can materially reduce long-run costs.

IV. Improve the Busbar Mapping Process to Reduce Long-Term Transmission Costs

To reduce long-run transmission costs, the Commission should improve the transparency and rigor of its busbar mapping process. Busbar mapping decisions directly shape the transmission upgrades that are ultimately planned and built. When capacity is mapped to locations where projects are unlikely to be developed, whether due to interconnection constraints, screening criteria misalignment, land-use issues, or lack of demonstrated commercial interest, ratepayers risk funding upgrades that do not increase deliverable clean energy. Conversely, mapping that is grounded in real-world project feasibility helps ensure transmission is built in the right places, minimizing rework, delays, and the need for additional corrective upgrades.

In the final version of the Concept Paper, the Commission should include specific near-term process steps to facilitate improved busbar mapping and reduce the risk of ratepayer-funded transmission being planned for locations where resources cannot be developed. At a minimum, LSA and SEIA recommend that the Commission commit to: (1) increased transparency into the busbar mapping process, especially between the first and second rounds where the most subjective decisions are made, including publishing a clear “change log” that identifies all material MW shifts by busbar and the reason for each shift; (2) clear, record-based justifications for mapping changes, including the specific screening criteria or data inputs driving the change and the Commission’s rationale for preferring one location over another; and (3) structured opportunities for stakeholder input (e.g., early workshops) focused on busbars with criteria-alignment issues so CPUC staff can gather developer and local expertise on feasibility constraints and mitigation options. These steps would improve the accuracy of mapped capacity, help developers align siting decisions with the planning process, and ultimately lower costs by ensuring transmission is planned and built where viable clean energy can actually interconnect.

V. California also needs distributed energy resources that avoid transmission costs (SEIA only).

The topics covered in the Concepts Paper do not address the third topic that AB 3264 required the Commission to address:

913.10 (b)(3) *Other proposals identified by the commission or other consulted parties that, in the judgment of the commission, could accelerate the development of, and reduce the cost to ratepayers of expanding, the state's electrical transmission grid.*

SEIA submits that an important way to “reduce the cost to ratepayers of expanding, the state’s electrical transmission grid” is to encourage the development of distributed energy resources (DERs) that do not require new transmission and that avoid transmission costs. The least-cost new transmission line is the one that does not need to be built. DERs alone are not sufficient, of course, to meet the state’s future energy needs and climate goals, and there is a trade-off that must be carefully evaluated between the higher costs of smaller-scale DERs and the savings from lower transmission and other grid costs. But it would be a mistake to assume that those goals can be reached entirely with utility-scale generation and high-voltage transmission. California’s present need for new resources is so large that resources at all scales are required.² Accordingly, state policy and planning have long recognized that DERs will be an important and integral part of the state’s resource portfolio, but DERs will not be fully valued in the state’s planning and procurement processes until their ability to avoid transmission costs is accurately and consistently determined.

In other words, California needs to ensure that DERs as “non-wires alternatives” to new transmission are not neglected. There are many initiatives that the state should consider and adopt in this area. SEIA repeatedly has provided the Commission with proposals to support DER deployment as an alternative to new transmission: in comments in the Integrated Resource Planning dockets, in proceedings to revise the Avoided Cost Calculator (ACC), in DER-specific proceedings, and in testimony in IOU general rate cases (GRC), as referenced below. But progress in recognizing and quantifying the ability of DERs to avoid transmission has been slow. Here are the initiatives that SEIA continues to recommend:

² The most recent base Integrated Resource Planning (IRP) portfolio adopted in D. 26-02-057 shows a need for 36 GW of new utility-scale solar and 18 GW of new utility-scale storage in the next six years, by 2031. See D. 26-02-057, at Table 6.

- 1. Develop a meaningful program for front-of-the-meter (FTM) distributed solar and storage resources.** California has lacked a sustained, commercially viable program for moderate-sized (1 MW to 5 MW) distributed, wholesale, FTM solar and storage in or near load centers. These distributed, wholesale, FTM resources are not selected in the current IRP modeling largely because the benefits of their location are not considered. Among the most important of these benefits are avoided transmission costs, particularly when solar and storage are installed together on the same site.³
- 2. Address local reliability/local procurement issues in the IRP.** For years the CPUC’s IRP process has neglected the importance of local resource development as an alternative to serve transmission-constrained local areas, to avoid transmission costs, and to allow the retirement of local fossil generation. SEIA, environmental justice advocates, and other parties have repeatedly urged the Commission to undertake meaningful planning and procurement to address local reliability issues, but the many CPUC orders adopting IRP portfolios since 2020 have made only minor progress in this area, such as the adoption in D. 24-02-047 of a High Gas Retirement sensitivity case to transmit to the CAISO for further study.⁴

³ See R. 25-06-019, *Comments of the Solar Energy Industries Association and Large-Scale Solar Association on the Ruling Seeking Comments on Electricity Portfolios For 2026-2027 Transmission Planning Process and Need for Additional Reliability Procurement* (October 22, 2025), at pp. 15-16. Also R. 20-05-003, *Reply Comments of Solar Energy Industries Association in Response to the Administrative Law Judge’s Ruling Seeking Comments on Electricity Resource Portfolios for the 2023-2024 Transmission Planning Process* (November 10, 2022), at pp. 5-6, and R. 20-05-003, *Comments of Solar Energy Industries Association on Staff Paper on Procurement Program* (December 12, 2022), at pp. 11-13.

⁴ See **D. 20-03-028**, at pp. 90-91: “The Commission also acknowledges the need for additional focus on analysis to determine ongoing need for, and potential retirement of, natural gas generators, with a priority on disadvantaged communities and local air pollutant emissions.” See also **D. 22-02-004**, at pp. 133-134 and 166: “we will be developing a more sophisticated modeling toolkit beginning in 2022, capable of local analysis, to help us better understand how to advance the policy objectives of reducing reliance on Aliso Canyon, reducing dispatch of natural gas generation, and contributing to an “orderly” retirement of the fossil-fueled generation fleet as it ages.” This “tool kit” has yet to materialize. **D. 24-02-047**, at pp. 78-83 conveyed a High Gas Retirement sensitivity to the CAISO for further study but deferred any action on this sensitivity to the next IRP cycle. Most recently, see **D. 26-02-057**, at 40: no local procurement requirement was adopted, with the Commission stating that “[w]e also intend to continue to evaluate the need for additional local solutions in IRP planning and procurement in general, as discussed in the Scoping

3. **Do not treat transmission projects in CAISO Transmission Plans as sunk costs** for resource planning and DER pricing/evaluations. Transmission plans can change, and changes in demand often result in approved transmission projects being cancelled or deferred. In other words, avoided transmission costs are not just counter-factual, but at times can be directly observed.
4. Encourage the CAISO Transmission Planning Process to **expand consideration of non-wires alternatives (NWAs)**. The Commission has taken some initial steps in this direction but has acknowledged that more are needed.⁵
5. Accurately determine and **adopt marginal transmission costs** for use in DER pricing and cost-effectiveness evaluations – and in ratemaking applications such as the ACC, economic development rates, electric vehicle charging rates, and dynamic pricing. The Commission has reviewed and adopted marginal transmission costs only once, for PG&E in Decision 21-11-016.⁶ Without an accurate estimate of how transmission costs change with changes in demand, it is difficult to value the benefits of DERs in avoiding transmission costs.
6. Pursue **reforms in the design of IOU transmission rates at the FERC** to emphasize the time-dependence of transmission costs. Current transmission rates are designed to maximize cost recovery for the IOUs; as a result, transmission rates rely almost entirely on non-time-sensitive energy rates (for residential customers) or on non-coincident demand charges (for commercial and industrial customers). Such rates fail to send customers accurate price signals that reflect demand conditions on the CAISO grid and fail to encourage the demand flexibility that can reduce the peak loads that drive the need for new transmission. The Commission represents the interests of California ratepayers

Memo for this proceeding, as well as in the context of local capacity need evaluation in the resource adequacy proceeding.”

⁵ See **D. 22-02-004**, at p. 162, approving two storage projects as NWAs: “Moving forward, the Commission can seek to establish a more predictable process for how similar transmission mitigation or other system benefit projects might be evaluated and approved.”

⁶ See **D. 21-11-016**, at pp. 65-68. Also see A. 24-09-014, Prepared Direct Testimony of R. Thomas Beach on behalf of the Solar Energy Industries Association (served March 6, 2026), at pp. 23-25, discussing the uses and need for marginal transmission costs. Available at [Microsoft Word - Direct Testimony of R Thomas Beach on behalf of SEIA in A24-09-014 - PGE GRC Phase 2 - final.doc.](#)

before the FERC and could seek additional state budget support to take action before the FERC to address these rate design flaws.⁷

VI. Conclusion

LSA and SEIA appreciate the Commission's thoughtful approach to evaluating transmission cost reduction strategies. Based on our experience developing large scale clean energy projects, we emphasize that:

- Speed, not ownership model, is the most important determinant of cost.
- Reducing permitting, procurement, and construction delays should be the CPUC's top priority.
- Quantifying the cost of delay will strengthen the final report and guide effective policy.
- Conditional approval mechanisms can accelerate readiness and reduce long-term costs.
- Improving busbar mapping transparency and methodology, through documented mapping changes, clear justifications, and structured stakeholder input, will help ensure transmission is planned where resources can actually be developed, reducing the risk of unnecessary investment.

In addition, SEIA observes that California's efforts to encourage DERs also represent an important strategy to reduce transmission costs, by deploying distributed resources that avoid transmission costs altogether. The transmission-related DER issues discussed above go beyond the limited scope of the Concept Paper but must be addressed to respond to the full scope of the study that AB 3264 requires.

We look forward to continued engagement and encourage the Commission to incorporate these recommendations into the final AB 3264 study for the Legislature so that California can build needed transmission faster, at lower cost, and in the locations that best support timely clean energy development.

⁷ See the SEIA testimony from A. 24-09-014, referenced above, at pp. 56-60.