# Viridon California LLC Comments on Working Concepts in Transmission Financing and Ownership Paper

## Introduction

Viridon California LLC ("Viridon") appreciates this opportunity to provide comments on the Working Concepts in Transmission Financing and Owner Paper ("Concept Paper"). The Concept Paper addresses the Commission's Assembly Bill ("AB") 3264 requirement to prepare a study with recommendations to "reduce the cost to ratepayers of expanding the state's electrical transmission grid" and review potential changes to transmission financing and ownership models.[1]

Viridon encourages the Commission to prepare a final report that advances competitive solutions to construct cost-effective transmission infrastructure, while acknowledging the potential benefits of access to public debt infusion and targeted public-private partnerships. As the Commission has repeatedly advocated at the Federal Energy Regulatory Commission ("FERC"), opportunities for competitive transmission development should be increased and any efforts that cause a retreat from the competitive process "would result in unjust and unreasonable increases in ratepayer costs for the necessary transmission buildout in the coming decades."[2] It is vital that any potential changes to financing and ownership models do not undercut the benefits provided by the competitive transmission solicitation process but, instead, are structured to preserve and strengthen competitive transmission development, which remains the most empirically supported mechanism for reducing ratepayer costs.

Viridon's comments below are organized consistent with the main sections in the Concept Paper and in response to the specific questions posed therein. Questions not addressed have been omitted.

## Transmission Ownership Structures

The Concept Paper correctly notes the three primary transmission ownership structures: (1) the investor-owned utility model, (2) public models, and (3) independent transmission utility models. Transmission projects can be developed through combined models as well. For example, the Concept Paper notes the Path 15 Upgrade Project in its discussing independent developers and competitive solicitation.[3] However, the Path 15 Upgrade Project represents a combined public-private partnership between the Western Area Power Authority ("WAPA") and an independent

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[1] Public Utilities Code Section 913.10(b). The Concept Paper also properly acknowledges that Senate Bill ("SB") 254, passed in 2025, established the California Transmission Infrastructure Accelerator ("Transmission Accelerator") as a potential new mechanism to finance electrical transmission projects with public debt.
[2] Initial CPUC Comments on FERC April 21, 2022 Notice of Proposed Rulemaking ("NOPR") in Docket No. RM21-17-000, pg. 59. (Available at 20220817-5255_RM2117000CPUCNOPRComments.pdf.)
[3] Concept Paper at page 10.

developer. Notably, the Path 15 Upgrade was not subject to competitive solicitation, but it does demonstrate that private-public partnerships can provide unique solutions to transmission infrastructure needs. WAPA's participation allowed for an expedited permitting process, while the independent developer provided timely private capital to support the accelerated timeline. From CAISO / FERC approvals to commissioning, the project was completed in approximately 2.5 years. This alignment of public and private capabilities allowed the state to address a critical north-south transmission constraint in record time.

In developing its recommendations, the Commission should ensure that the envisioned transmission ownership structures encourage competitive developers to bid for transmission projects. Project ownership and the ability to earn a return on equity provides the incentive for independent transmission developers to participate in competitive solicitations, which in turn provides robust cost containment. At the same time, the Concept Paper emphasizes that transmission project delays - often extending average development timelines from 7-8 years to significantly longer - are a major driver of cost escalation. Competitive transmission development models that incorporate enforceable cost containment and schedule commitments can help mitigate these risks by aligning developer incentives with timely delivery. As the Commission noted in comments at FERC, "the Order 1000 competitive processes that have been conducted to date have provided substantial benefits to consumers in the form of significantly lower project offer prices, cost containment commitments, and the identification of innovative solutions to address transmission needs."[4] Reducing opportunities for independent transmission owners will undercut those benefits.

**Commission Questions**

2. Are there public sources that provide evidence of savings related to competitively bid projects versus projects that default to incumbent investor-owned utilities?

Many sources show that competitively bid projects provide significant quantifiable financial benefits when compared to projects that default to incumbent investor-owned utilities. For example, the Brattle 2019 Competition Report ("Brattle Report") analyzed the results of Order 1000 compliant competitive processes conducted between 2013 and 2017. The Brattle Report concluded that competitive processes "have yielded project offer prices that, on average, were significantly below the projects' initial cost estimates," averaging 40% "below either the initial project cost estimates or the lowest cost incumbent project offer price."[5] The Commission cited the Brattle Report in its FERC NOPR comments and further noted that subsequent actual project data from the Harry Allen–El Dorado and Suncrest projects have been completed, which were built by independent transmission developers, "demonstrate[d] the significant cost savings

[4] Initial CPUC Comments on FERC April 21, 2022 Notice of Proposed Rulemaking ("NOPR") in Docket No. RM21-17-000, pg. 61. (Available at 20220817-5255_RM2117000CPUCNOPRComments.pdf.)
[5] https://www.brattle.com/wp-content/uploads/2021/05/16726_cost_savings_offered_by_competition_in_electric_transmission.pdf

attainable from competition."[6] The Commission calculated cost savings of $58 million, or, 29%, for the Harry Allen–El Dorado project, and $59 million, or 55%, for the Suncrest project, assuming historical cost escalation levels.[7]

The Electricity Transmission Competitive Coalition ("ETCC") has presented additional evidence demonstrating a similar trend for competitively bid projects nationwide between 2021 and 2025. Figure 1 below illustrated the discount associated with such competitive projects by comparing RTO/ISO estimated costs[8] with winning bid costs.[9] ETCC's analysis shows that customers save an average of 34% when comparing winning bids to cost estimates. Figure 1 also shows that all the selected bids included cost containment provisions.

[6] Initial CPUC Comments on FERC April 21, 2022 Notice of Proposed Rulemaking ("NOPR") in Docket No. RM21-17-000, pg. 65-66. (Available at 20220817-5255_RM2117000CPUCNOPRComments.pdf.)
[7] Id. at 67.
[8] RTO/ISO estimated costs are largely derived from historical investor-owned utility costs.
[9] ETCC's analysis is accessible here: https://electricitytransmissioncompetitioncoalition.org/wp-content/uploads/FERC-Order-1000-Competitively-Bid-Transmission-Projects-2021-2025.pdf.

# Figure 1

**FERC Order 1000 Competitively Bid Transmission Projects 2021 - 2025 [1][2]**

| Bid Year | Region | Primary Developer | Project | RTO/ISO Estimate ($MM) | Winning Bid Cost ($MM) | Cost Savings ($MM) | Competitive Discount | Cost Containment[3] | Schedule Guarantee |
|---|---|---|---|---|---|---|---|---|---|
| 2025 | MISO | Transource | Bell Center - Columbia - Sugar Creek - IL/WI State Line 765 kV | 1446 | 1006 | 440 | 30% | Yes | Yes |
| 2025 | MISO | Viridon | Wisconsin Southeast 345 kV | 662 | 349 | 313 | 47% | Yes | Yes |
| 2025 | SPP | Xcel | Lynch - Medanos 115 kV (NE/CO) | 38 | 22 | 16 | 42% | Yes | Yes |
| 2025 | SPP | Transource/Xcel | Beckham County - Potter 345 kV (OK/TX) | 251 | 223 | 28 | 11% | Yes | Yes |
| 2025 | MISO | LS Power | Reid EHV - IN/KY State Line 345 kV | 74 | 78 | -4[5] | -5% | Yes | Yes |
| 2024 | SPP | Transource | Mathewson - Redbud 345 kV (OK) | 81 | 72 | 9 | 11% | Yes | Yes |
| 2024 | CAISO[4] | Viridon | Humboldt - Collinsville 500kV T-Line/Sub (CA) | 2327 | 1165 | 1162 | 50% | Yes | Yes |
| 2024 | CAISO[4] | Viridon | Humboldt - Fern Road 500kV T-Line (CA) | 1190 | 684 | 506 | 43% | Yes | Yes |
| 2023 | SPP | NEET | Crossroads - Hobbs - Roadrunner 345 kV (NM/TX) | 366 | 291 | 75 | 20% | Yes | Yes |
| 2023 | MISO | Ameren | Denny - Zachary - Thomas Hill - Maywood 345 kV (MO) | 500 | 273 | 227 | 45% | Yes | Yes |
| 2023 | CAISO[4] | NEET | North Gila - Imperial Valley 500kV T-Line (CA/AZ) | 340 | 256 | 84 | 25% | Yes | Yes |
| 2023 | CAISO[4] | NEET | Imperial Valley - North of SONGS 500kV T-Line/Sub (CA) | 2280 | 1004 | 1276 | 56% | Yes | No |
| 2023 | CAISO[4] | Lotus | North of SONGS - Serrano 500kV T-Line (CA) | 503 | 292 | 211 | 42% | Yes | No |
| 2023 | MISO | Ameren | IA/IL State Border - Ipava 345 kV | 26 | 20 | 6 | 23% | No | Yes |
| 2023 | MISO | Dairyland | 345 kV Deadend (WI) - Tremval 345 kV | 14 | 8 | 6 | 43% | Yes | Yes |
| 2023 | MISO | Ameren | Fairport to Denny to IA/MO State Border 345 kV | 161 | 84 | 77 | 48% | Yes | Yes |
| 2023 | MISO | LS Power | Hiple to IN/MI State Border 345 kV | 254 | 77 | 177 | 70% | Yes | Yes |
| 2022 | SPP | NEET | Wolfcreek - Blackberry 345 kV (KS)* | 97 | 85 | 12 | 12% | Yes | Yes |
| 2021 | SPP | NEET | Minco - Pleasant Valley 345 kV (OK)* | 81 | 55 | 26 | 32% | Yes | Yes |
| | | | | **Average Customer Savings** | | **245** | **34%** | | |

1. All information contained here is based on publicly available information on each respective RTO/ISO website. Excludes sponsored projects approved by PJM, which do not estimate individual line costs prior to competitive solicitation. ISO-NE and NYISO have not facilitated competitive transmission RFPs in the last five years, excluding offshore wind transmission. Data does not include projects for which the winning bid cost is not publicly disclosed.
2. Table reflects 2021–2025 bid years, representing the period during which competitive solicitation processes have reached sufficient maturity and consistency across RTOs/ISOs to support meaningful comparison.
3. Cost containment provisions include Hard Caps, ROE Stepdown Points, and ATC caps.
4. CAISO estimates show the midpoints of CAISO cost estimate ranges for the competitive portions of projects.
5. This does not reflect developer performance; all bids received exceeded MISO's pre-RFP planning estimate, and the winning bid was the lowest proposal submitted.

* Project is in service; met or beat need date; ratepayer costs held to cost cap.

Furthermore, evidence from the CAISO shows that actual costs are largely consistent with their cost caps. CAISO has noted that six projects awarded to developers via competitive solicitation were completed during calendar years 2015 and 2025. Of the six projects completed, five had cost caps included in their APSAs. Of those projects with a cost cap, final cost figures show the following relationship with the cost caps: (1) approximately $6.5 million above cost cap (representing 1.5% of cost cap); (2) approximately $1.5 million above cost cap (0.2% of cost cap); (3) approximately $27,000 under cost cap; (0.1% of cost cap); and (4) approximately $6.5 million above cost cap (0.95% of cost cap).[10] This shows that the CAISO's competitive process has not only lowered bid costs, it has effectively lowered actual transmission project costs.

## Alternative Ownership Models

The Concept Paper properly notes that interaction between public-private partnerships and competitive CAISO projects remains an open question. Fundamentally, any public-private partnership structures implemented in California should not undermine the competitive process and the incentive for private developers to participate in that process. The Commission should ensure that such partnerships do not disadvantage independent developers, limit opportunities for competitive solicitation, or pre-determine the competitive process.

**Commission Questions**

> 9. Please comment on feasibility of either of these [public-private partnership] models for California. Please specify barriers and the structural elements that would have to exist for the model to develop transmission at lower costs.

The potential public-private partnership models presented in the Concept Paper could introduce unintended risks to continued competitive development and undermine the full cost-saving and ratepayer protection benefits of competition described above, especially as the Commission evaluates the role of the Transmission Accelerator established in SB 254. Independent developers assume development and financing risk and commit capital to pursue transmission projects. These investments are supported by the expectation of ownership opportunities and the ability to earn a return on equity. To the extent the Transmission Accelerator, or another public-private partnership structure, removes or limits such opportunities, participation in the CAISO's competitive solicitation processes is likely to decline. Similarly, structures that create asymmetric access to financing that advantages certain participants could distort competitive outcomes, while structures that result in the implicit pre-selection of development partners prior to competitive solicitation could further diminish competitive pressure. Any reduction in participation can materially weaken competitive pressure, particularly given the limited pool of qualified developers, and thereby diminish the ability of the solicitation process to drive cost discipline.

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[10] Docket No. ER23-2309-001 et. Al, Direct and Answering Testimony of Commission Trial Staff Witness Johannes A. Shade at page 15. FERC is currently reviewing recoverable costs for the TenWest Link Project in the context of an ongoing proceeding.

Notwithstanding this concern, Viridon believes that providing access to public debt may be appropriate under the right circumstances. Such access could potentially reduce financing costs and tax burden associated with transmission projects. However, Viridon cautions that access to public debt should be considered after the CAISO conducts its competitive solicitation. Trying to implement a public debt option as part of the CAISO bid evaluation could inappropriately distort competition by favoring a specific developer, undermining a level playing field, and weakening or eliminating the competitive pressure that drives developers to submit cost-effective and innovative solutions. This, in turn, could erode the very cost discipline the solicitation process is designed to achieve, while introducing additional complexity, uncertainty, and delay into the evaluation process. In sum, the public financing option should not materially impact the CAISO's competitive solicitation process.

The Commission should also weigh any potential public financing benefits against corresponding increase in risk. To the extent a project is publicly financed, the public entity will bear the financial risk associated with cost overruns and schedule delays. In contrast, the independent developer assumes these risks, consistent with its bid, in the competitive construct. Any cost reduction associated with public financing is discrete and limited, whereas the exposure to cost overruns and delays can be significantly greater.

## Conclusion

AB 3264 directs the Commission to identify recommendations that reduce the cost to ratepayers of expanding California's transmission grid. The record demonstrates that competitive transmission development has consistently delivered measurable cost savings, innovation, and cost protection benefits for ratepayers. Accordingly, the Commission should prioritize policies that expand and preserve competitive solicitation processes.

Public financing tools, including those enabled by SB 254 and the Transmission Accelerator, may provide incremental benefits by lowering the cost of capital. However, these tools should be implemented in a manner that is neutral to competition, available on equal terms to all developers, and structured to complement, rather than replace, competitive procurement.

By maintaining a strong competitive framework while thoughtfully integrating financing innovations, the Commission can best achieve its statutory objective of delivering cost-effective transmission infrastructure for California ratepayers.

Respectfully submitted,

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