

CAISO 2024 Policy Roadmap Transmission Planning Enhancements

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- Network service subscription model in the TPP
 - Refinements of Transmission Economic Assessment methodology

**Network upgrade subscription
model in the transmission
planning process that informs
interconnection process TPD
prioritization**

- Allow for competitive mechanisms to allow third party transmission developers and generation developers to reduce barriers to the ability to fund a share of transmission or interconnection network upgrades, reducing overall costs to customers, and receive commensurate benefits with their share of investment
- Maintain interconnection cost signals to drive cost-effective choices by developers by ensuring a portion of network upgrade costs triggered by new interconnection request(s) is assigned to new generator(s), regardless of whether the upgrade is identified through an interconnection process or a transmission planning process.
- Socialize costs of transmission upgrades equitably with a focus on allocating costs commensurate with benefits received as result of transmission investments, including to generation developers if there is a way to subscribe to fund a portion of those costs to receive commensurate benefit (“deliverability”)
- Upfront investment in the transmission system subscribing to network upgrades that an Interconnection Request is effective to will provide planning entities needed transparency and more certainty on generation interconnection plans to increase confidence in those entities proposed new resource planning

Concept: TPP subscription model that would inform interconnection priority & viability



- Allow subscribing parties to partially fund (“subscribe”) to network upgrades to receive commensurate share of increased deliverability relative to their share of upgrade
- Subscribing parties include utility and non-utility interconnection customers or state or federal programs administering subsidies
 - Proposal focuses on receiving benefits of investment in form of FCDS
- Propose new Network Upgrade Subscription Model in the TPP as follows:
 - (1) New economic study request type in TPP evaluating net benefit of proposed network upgrades for “alternative points of interconnection or upgrades” beyond the CAISO identified transmission zones to ensure sufficient transmission capacity for interconnections is approved
 - (2) Request stakeholders provide confidential subscription interest to CAISO with willingness to fund a portion of a proposed transmission project in draft TPP in exchange for being treated as Option A, Group A project
- Any projects approved in TPP that entities indicated interest in subscribing would be included in the cost estimate in the proposed TPP plan as offset to overall costs showing the aggregate reduction in transmission costs from subscriptions
 - Subscription amounts paid reduce transmission plan costs and resulting impacts to the TAC because subscribing parties have funded a portion of upgrades
- Entities that indicated interest in subscribing would be invoiced by the CAISO if recommended projects are approved and could then provide subscription invoices in next TPD affidavit to qualify for new Group A for MW commensurate with amount (\$)

Interconnection process changes to project options & allocation groups



- Option A and Option B can continue as currently defined if the processes are reformed:
 - Option A: Projects requiring TPD to be able to continue to commercial operation because they are selling long-term RA seeking Full Capacity TPD
 - Option B: Projects that will continue to commercial operation without TPD because they are not selling long-term RA seeking Energy-Only TPD
- Vistra proposes Option A reformed to have three simplified Allocation Groups:
 - New Group A: Projects that upfront subscribed to a portion of an approved NU
 - New Group B: Projects that did not upfront subscribe to any approved NU
 - Existing Group C: Projects that achieved Commercial Operation
- TPD allocation within Option A groups conceptually:
 - Allocate deliverability within group A then group B based on viability scores
 - For projects that received FCDS, customer decision options may be sufficient.
 - For projects that received PCDS or for those that did not receive any allocation,
 - Clarify that “Build ADNU identified in Phase II” option results in receiving FCDS and converting to Energy Only converts it to Option B project
 - Propose new option identify its willingness to fund a portion of the ADNU and its magnitude of interest (MW, \$-MW), which will be used as a “new interconnection economic study request” in the current TPP cycle, and remain parked until the final TPP decides on requested NU, and after unparking be treated as Option A

Example of New NU Subscription Option: Developer selects new option in March/April 2025
ADNU included in the new interconnection economic study requests for the 2025-2026 TPP cycle with final plan approved in May 2026. The project would park in 2025 and unpark to submit its affidavit end of 2026 to participate in 2027 TPD allocation process.

Transmission process changes to add new interconnection economic study requests



- Allow utility and non-utility developers to submit new type of economic study - **new resource interconnection economic study** – for alternative POI or upgrades
- Subscribing parties submit comments requesting new interconnection economic study on net benefits of increasing deliverability on a constraint or in a zone
 - Written comments should identify constraints, transmission zones, or Transmission Capability Estimates' NU to be studied
- Allow stakeholders to confidentially submit subscription interest on requested new interconnection economic studies within reasonable time after study requests
 - Should indicate magnitude of interest **confidentially** (MW, \$-MW) in funding NU to increase deliverability effective to specified constraints, zones, or NU
- CAISO to assess limiting constraints or zones and study potential upgrades to increase deliverability on constraint or within zones, either from newly identified NU or from Transmission Capability Estimates
- CAISO should modify TEAM assessments used for the new economic study type:
 - Reduce cost estimates by aggregate of all indicated subscription interest for each new interconnection economic study on cost side of the calculation
 - May be complex, but is there way to include benefits of increasing deliverability?
- If modified TEAM calculation results in positive net benefit, then consider recommending network upgrades for Board approval
- If interconnection customer subscribing, then can request priority treatment in TPD

Transmission process changes to allow subscriptions to subsidize transmission costs



- We believe there is commercial interest to subsidize upgrades by potential subscribing parties, but there is no existing mechanism today
- Proposing a second new TPP step to allow subscriptions for a portion of transmission costs associated with the recommended Transmission Plan for any preliminarily recommended transmission project, including economic interconnection studies.
- CAISO should request comments on preliminary or draft recommended Transmission Plan for parties to indicate interest to subsidize a draft recommended project
 - Should indicate magnitude of interest **confidentially** (MW, \$-MW) in funding a specific project(s) in the draft plan
- CAISO would include aggregate subscriptions requested in final plan to show cost savings from subscribers on the recommended plan
- Subscribing parties' would receive commensurate benefit for their investment by:
 - Utility and non-utility interconnection customers afforded new Group A priority to TPD allocation process in exchange for their funding a portion of a NU that can support interconnection of its projects
 - State or federal programs can invest in transmission projects that further their policy goals with state or federal transmission subsidies being approved through legislation and receive reduced TAC as the benefit of investing in plan

Transmission Economic Assessment Methodology General Improvements

- Refinements of Transmission Economic Assessment methodology that is outdated in its assumptions and undervalues economic projects.
- Should review TEAM methodology and inputs to ensure still accurate, e.g.:
 - Generation payments
 - Congestion revenues
- Reducing congestion may result in lowering LMPs included in the generation payments portion that count as reducing payments to Investor Owned Generation. However, we have noticed that the data quality is insufficient and merchant generation is being included in utility owned bucket.
- Reducing congestion may result in lowering congestion revenues that also counts as reduction in net benefits. Methodology appears to fully count congestion payments rather than to identify what portion of the congestion is provided as CRR allocation ensuring that congestion paid to auction recipients is not included.