



California ISO

Decision on Interconnection Process Enhancements Track 2

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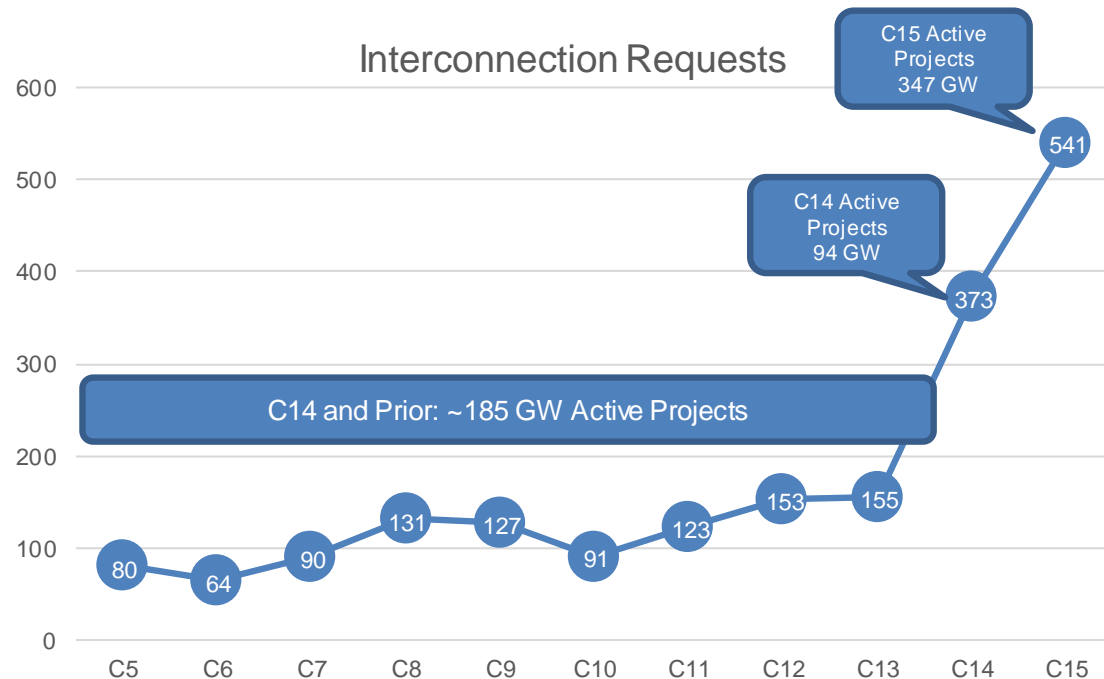
ISO Board of Governors meeting

General Session

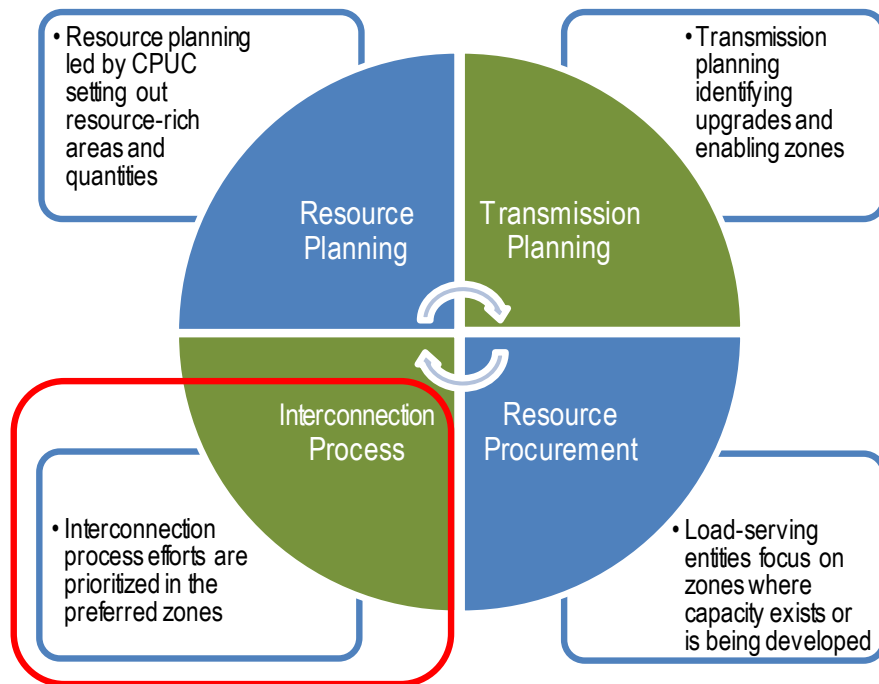
June 12, 2024

Current circumstances necessitate transformative changes to the interconnection process

- CPUC resource portfolios call for over 7,000 MW per year for the ISO's 2023-2024 planning cycle
- Interconnection requests continue to skyrocket
 - Many in areas not part of state resource plans, and in high volumes even in those areas
 - Cluster 15 in April 2023 vastly exceeded expectations
 - The queue now has roughly three times the capacity of that which will be needed to achieve California's 2045 requirements



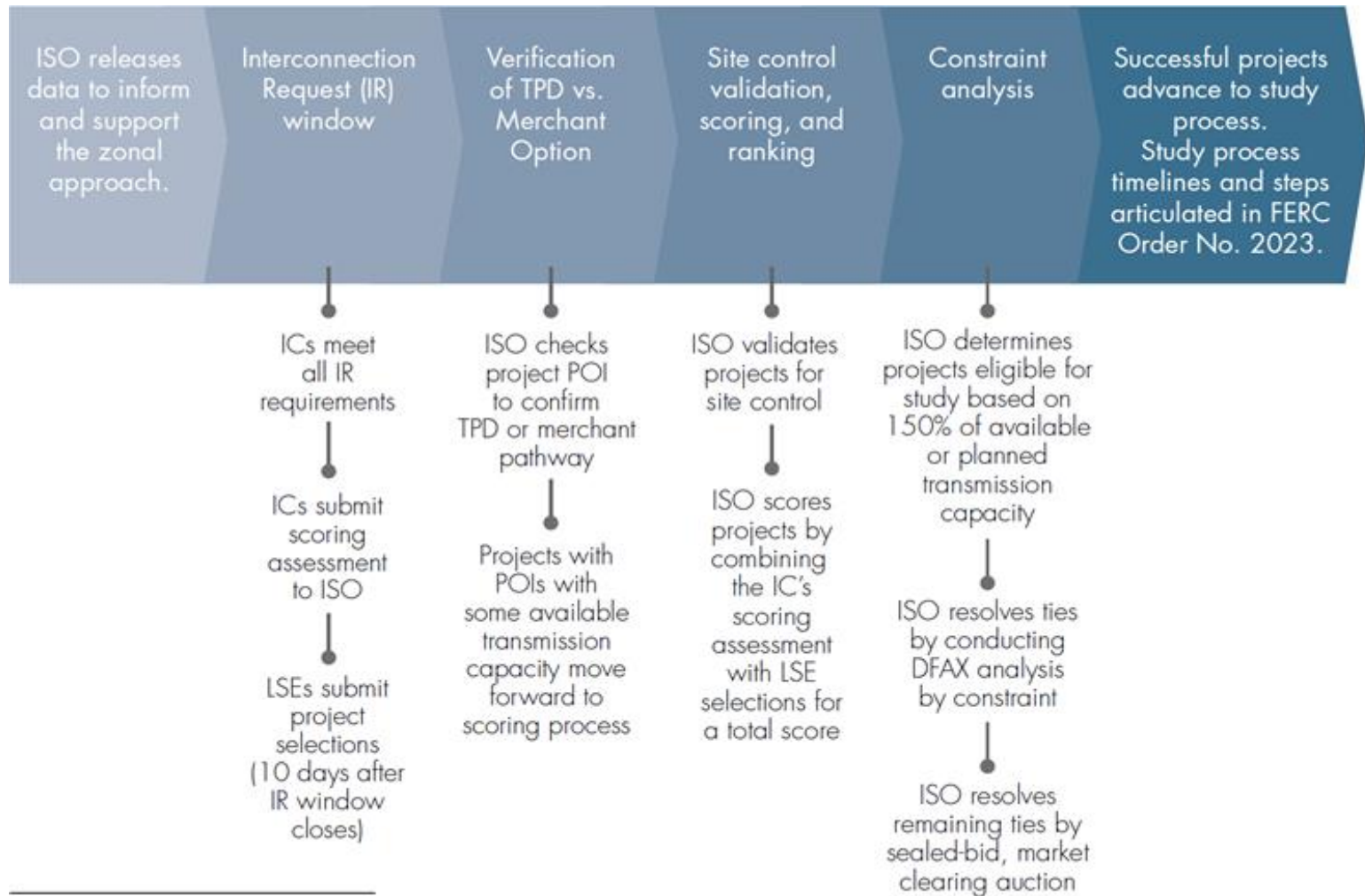
Transformative change to the interconnection process is part of a larger coordinated strategy with state agencies



Expectations:

- The CPUC will provide direction to its jurisdictional load serving entities (LSEs) to pursue resources in the key zones, and provide resource portfolios as input to the ISO TPP
- Procurement will focus on the expected quantities enabled by the planned transmission development, as set forth in the ISO's transmission planning process (TPP)
- State agencies, local regulatory authorities (LRAs), and LSEs will continue to significantly inform the ISO's TPP

The reformed interconnection request intake process emphasizes transmission availability and project readiness



The ISO proposed several reforms to current contract and queue management practices

- Updates to the Limited Operations Study process
- Improved data gathering from inverter-based resources
- Limitations on the ability to transfer Transmission Plan Deliverability
- More stringent commercial viability criteria for projects in the queue
- Updates to the process for modification requests
- Similar timed financial security postings for projects with shared upgrades
- Expedited timelines for commencing network upgrades
- New implementation deposit for queue management and the new resource implementation process

Stakeholder responses to the final proposal reflect the magnitude of changes proposed

- Stakeholders sought clarifications around implementation of the zonal approach
- LSEs broadly supportive of the proposal
- Developer concerns focus on, but are not limited to the scoring criteria
 - Fairness and transparency of LSE allocation process
 - Influence of LSEs in the commercial interest category
 - Proportions of LSE-sponsored projects
 - Project viability and system need categories less granular
- Concerns with non-LSEs weighting compared to LSEs
- LSEs and developers expressed different concerns and sought clarifications around the Energy Only proposal
- General support for contract and queue management proposals, with requests for clarifications

The ISO has responded to stakeholder concerns through a final addendum

- Clarifications to the zonal approach
- Commitment to monitoring elements of the intake process, working with the CPUC and local regulatory authorities
- New requirement for LSEs to opt-in to the LSE allocation process and provide transparent selection criteria
- Commitment to exploring opportunities for increased non-LSE participation in Cluster 16
- Minor clarifications to elements of the scoring process
- Commitment to monitoring treatment of Energy Only resources
- Intent to make several components of the intake process severable

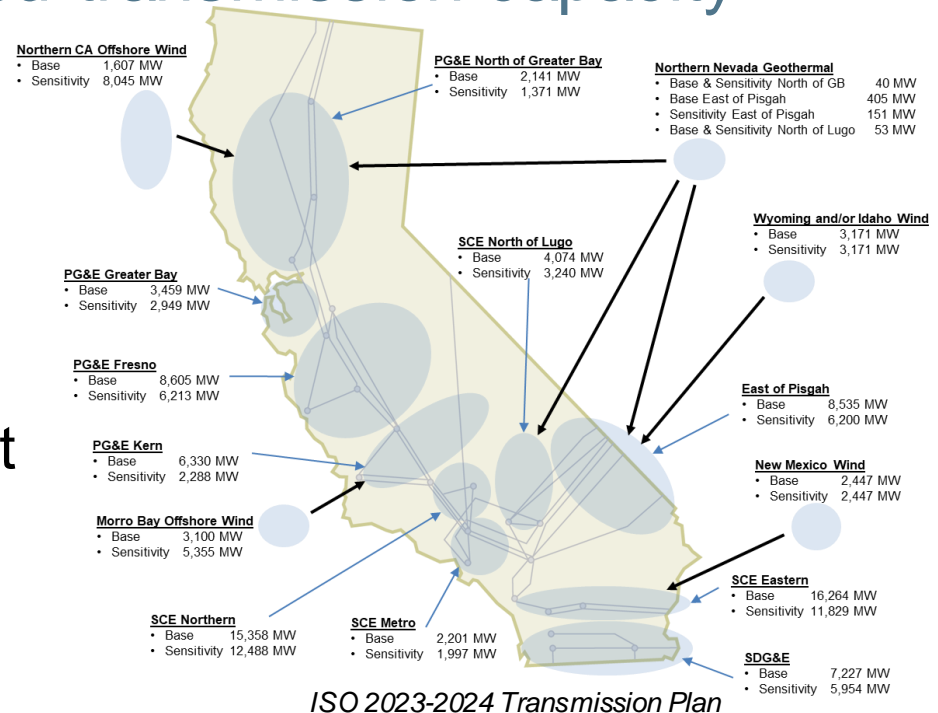
Management seeks approval of the Interconnection Process Enhancements Track 2 Final Proposal

- Transformative change is critical to adapting to increased demand and competition for new generation
- Final proposal prioritizes
 - alignment with state and local resource plans,
 - transmission availability
 - procurement needs
 - project readiness
- Queue management reforms will drive continued advancement of projects in the queue and provide clear authority for the ISO to withdraw stagnant projects
- Action is critical to address lengthening interconnection delays

BACKGROUND SLIDES

The ISO seeks to prioritize interconnections in areas with available and planned transmission capacity

- Designate zones as Transmission Plan Deliverability (TPD) or merchant zones using a constraint-based approach based on the project's Point of Interconnection (POI) to determine if a project can move forward to scoring



- Determine which projects advance to the study process using project score, distribution factor, and 150% of available capacity for each known area constraint.
- 150% ensures sufficient capacity for study and competition for deliverability and offtake after the study process.

The zonal approach will prioritize interconnections in areas with available or planned transmission capacity

Data availability is key to implementing the zonal approach

- The ISO will produce a report prior to the interconnection request window that includes critical information for stakeholders
- The ISO proposes to release individual interconnection reports to the public, with confidential information redacted
- The ISO will provide a heat map with specific information after each cluster study and restudy (as required by Order No. 2023)
- The ISO will capture the TPD allocations as well

The ISO proposes to score projects based on the interconnection customers' self-assessment and load-serving entity (LSE) selections

- Commercial interest (30%): Incorporate LSE and offtaker interest early to ensure the most commercially ready projects advance to the study process
 - LSE allocation process (0 to 100 points, based on percentage of capacity of the project awarded by LSEs)
 - Non-LSE interest (0 or 25 points)
- Project Viability (35%)
 - Completeness of an engineering design plan
 - Expansions of facilities under construction or in operation
- System need (35%)
 - Projects that can provide Local RA
 - Long lead-time resources

Auction revenues will support network upgrades

- Auction funds posted by an interconnection customer will be in favor of the Participating Transmission Owner
 - Financial security instruments are the same as currently allowed for interconnection financial security
- For successful auction participants, the ISO will refund auction-posted security within 90 days of notifying the ISO of commercial operations
- If a project withdraws, or is withdrawn prior to reaching commercial operation, some or all of the auction-posted security will be forfeited and used to offset the cost of still-needed network upgrades

The ISO proposes tie-breakers for equal scores behind a constraint

- Assess the distribution factor (DFAX) of the tying project's POIs to break the tie
 - DFAX is a measure of the impact of injections of energy from a generator at a particular location, which could result in required network changes on the grid
 - Projects will be selected in order of the lowest DFAX with the selection process ending with the project that caused the 150% threshold to be exceeded, regardless of the size of the last project
- If project ties still exist after the use of projects' DFAX, tied projects will move to an auction

The auction process is the final step for inclusion in the study process

- Only projects that remain tied following the DFAX tie breaker step will participate in the auction
- Market-clearing, sealed-bid auction for the right to be studied in a specific zone
 - Request auction bids (dollar per MW basis) after the project scoring process has been completed
 - Rank and select projects for study based on bid price, starting with the highest bid and progressing downward and ending with the project that exceeds the 150% MW transmission capacity limit
 - Bidders will only submit the clearing price at-risk auction financial security if they win the auction and proceed to be studied
 - Post the clearing price, but not the individual project bids, on the ISO website

The ISO proposes to treat Energy Only projects based on identification of need in the resource portfolios

- EO projects will have two options to interconnect:
 - Reimbursement option allows EO projects in zones where the CPUC portfolio identifies the need for EO resources
 - Eligible for reimbursement of the cost of reliability network upgrades
 - Capacity studied capped at 150% of EO portfolio amount for zone
 - Non-reimbursement option for all other EO resources that seek to interconnect in zones where the CPUC's portfolio has not identified the need for EO resources
 - Not eligible for reimbursement of cost of reliability network upgrades
 - No cap on the number of projects studied
- Zero Energy Only projects submitted interconnection requests in Clusters 10-15

The ISO proposes modifications to the “merchant option” pathway

- Will not compete for Transmission Plan Deliverability allocations
- Same cost recovery of posted financial security towards the cost of a Local Delivery Network Upgrade (LDNU) as Deliverability option projects
- Additional commercial readiness deposit toward the cost of the Area Delivery Network Upgrade (ADNU) to ensure developer confidence in the project’s viability under the merchant option
- Pathway to be released from the merchant project’s funding obligation, if need is identified in future resource planning portfolios

The Interconnection Process Enhancements are built upon the requirements of FERC Order No. 2023

- IPE reforms must work with the new process required under FERC Order No. 2023-A
 - Compliance Filing submitted May 16, 2024
 - FERC has no obligation to rule on the ISO's compliance filing within a given timeframe
- The ISO proposes to reengage with Cluster 15 in Q4 2024
- FERC granted the ISO permission to postpone Cluster 16 beyond 2024

The ISO proposes to initiate Track 3 of the initiative once Track 2 is resolved, addressing remaining issues

- TPD allocation modifications
- Basis for interim deliverability
- Intra-cluster prioritization for projects in Cluster 14
- Targeting the winter 2024 Board of Governors meeting to allow for March 2025 implementation