



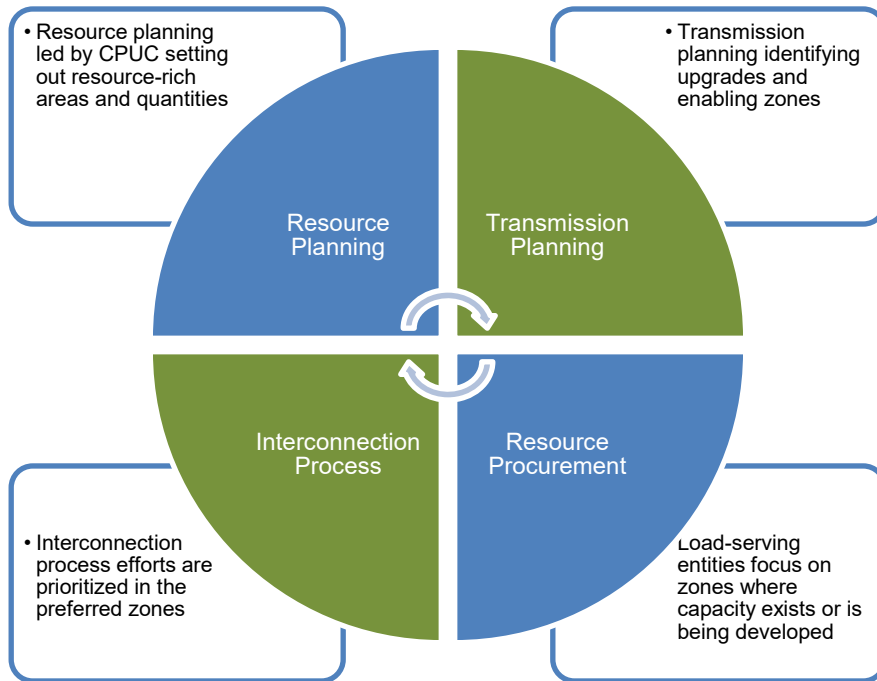
California ISO

CAISO - Order No. 1920 Compliance

ESIG Technical Workshop March 18, Tucson, AZ

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Transmission Planning and Generation Interconnection are two of four fundamental and interwoven processes:



The CPUC/CEC/ISO Memorandum of Understanding signed in December, 2022 sets the strategic direction for process improvements to:

- Tighten the linkage between planning, procurement direction, and the ISO interconnection process to the greatest extent possible.
- Create formal linkage between CEC SB 100/IEPR activities and the ISO and CPUC processes
- Reaffirm the existing state agency and single forecast set coordination
- Update references to current processes and set direction to updating process documentation

The ISO's participation in interregional planning keys off our regional transmission planning process

- Relies upon load forecasts and resource plans from our state and local regulatory authorities
- Annual transmission plan (10 and 15 years) is the formal approval document for expansion planning in our footprint
 - Responding to accelerating load growth and escalating clean energy needs
 - 2024-2025 Transmission Plan approved transmission totaling \$4.8 billion, largely load growth related.
 - Previous three transmission plans approved an average of \$5.8 billion, largely policy-driven transmission supporting access to resource basins
 - Focus on most efficient and effective long-term solutions, including grid enhancing technologies
- 20 Year Outlook assesses longer term needs
 - First prepared in 2022, updated in 2024
 - Establishes a longer-term direction and strategy
- FERC Order No. 1920 will require changes and add new considerations to regional transmission planning



Features of the CAISO's Compliance Filing for Order 1920 requirements

- The ISO filed its compliance filing with FERC on December 09, 2025
- Current transmission planning process will move to a biennial cycle with an interim reliability assessment
 - Current transmission planning cycles will continue through approval of the 2027-2028 Transmission Plan.
 - Transition to the new process **will begin in 2027 for the long-term planning process, and 2028 for the biennial transmission planning process** with first transmission plans issued in 2030
- Evaluation process will remain fundamentally unchanged, but will incorporate enhancements directed by the Order
- Integrate new long-term cycle with existing comprehensive reliability, economic, and policy assessment
- No proposed changes to cost allocation, following consultation with Relevant State Entities
- Continue alignment with neighboring planning regions

Proposed Order No. 1000 and Order No. 1920 Planning Cycles (2025-2034)

	2025				2026				2027				2028				2029				2030				2031				2032				2033				2034			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Current Transmission Planning Cycles	█				█				█				█																											
2025-2026 Transmission Planning Process	2025-2026 TPP █																																							
2026-2027 Transmission Planning Process					2026-2027 TPP █																																			
2027-2028 Transmission Planning Process									2027-2028 TPP █																															
New Order 1920 Process																																								
Interim Reliability Assessment (stand-alone reliability approvals in odd years)																																								
2030 Comprehensive Reliability, Policy, and Economic Plan (10 & 15 year)																																								
2030 Long Term Regional Plan (20 year)																																								
2032 Comprehensive Reliability, Policy, and Economic Plan (10 and 15 year)																																								
2034 Long Term Regional Plan (20 year)																																								
2034 Comprehensive Reliability, Policy, and Economic Plan (10 and 15 year)																																								
2038 Long Term Regional Plan (20 year) - Begins 2035																																								
2036 Comprehensive Reliability, Policy, and Economic Plan (10 and 15 year)																																								

CAISO's existing economic assessment methodology provides a strong platform for benefits determination

- For economic assessments, the CAISO uses its transmission expansion assessment methodology ([TEAM](#))
 - Hitachi GridView is used for production cost modeling analysis; nodal representation
 - Benefit-Cost Ratio (BCR) considers ISO Ratepayer Savings benefits
 - The TEAM methodology considers additional benefits calculations for RA, transmission loss savings; deliverability; public-policy, renewable integration benefit, and avoided cost of other projects
 - The methodology, in general, aligns well with the benefits calculations required under Order 1920
 - There are some areas in the CAISO's methodology that need further enhancements for Long Term Regional Transmission Planning

The CAISO is proposing to use the seven benefits as required by the Order

- CAISO will use the seven benefits for evaluating and selecting long-term transmission facilities:
 - avoided or deferred reliability transmission facilities and aging infrastructure replacement;
 - reduced loss of load probability or reduced planning reserve margin;
 - production cost savings;
 - reduced transmission energy losses;
 - reduced congestion due to transmission outages;
 - mitigation of extreme weather events and unexpected system conditions, and
 - capacity cost benefits from reduced peak energy losses.
- For a transmission project to be considered for further evaluation as a long-term regional transmission facility (LTRTF):
 - the BCR has to be equal to or greater than 1.0 in any of the scenario
 - must have measurable benefits in majority of the categories noted above



California ISO

Thank you!