



Draft Policy Initiatives Roadmap 2022 - 2024

Market and Infrastructure Policy

November 16, 2021

Annual roadmap process is a comprehensive planning process for enhancing and evolving the CAISO markets

- Roadmap developed through a stakeholder process to prioritize the policy initiatives the ISO will undertake over the next three years
- Annual roadmap process includes updating the Policy Initiatives Catalog
 - Directory of current, planned, and potential policy initiatives
 - New potential policy initiatives originate from stakeholders and internally at the CAISO
 - Updated twice a year but catalog submissions are accepted year-round

PRIMARY DRIVERS

Primary drivers of proposed 2022 three-year policy roadmap

- **Increased resource and load variability** - enhance the day-ahead market and extend to EIM entities to leverage regional diversity and provide west-wide benefits
- **Increasing amounts of storage resources** - enhance CAISO markets to efficiently dispatch storage resources in alignment with operational needs
- **Economic and reliability benefits of greater integration of Western markets** – extend the day-ahead market across a larger footprint and openly and optimally manage access to available transmission

MARKET DESIGN AND REGIONAL MARKETS

Extended Day-Ahead Market initiative is exploring expanded day-ahead market participation to provide regional benefits

- EDAM will improve market efficiency and more effectively integrate renewable resources by
 - Optimizing day-ahead unit commitment
 - Producing hourly energy transfer schedules
 - Capture resource diversity benefits and improve transmission utilization across a larger footprint
- This year's roadmap reflects the high-priority the CAISO is giving to enabling participating in EDAM by 2024

Day-Ahead Market Enhancements initiative addresses challenges of the transforming grid

- Efficiently schedule supply to address net load uncertainty and real-time ramping needs
 - Improve market efficiency and price signals by co-optimizing imbalance reserves with energy and ancillary services
 - Enhance RUC process to also schedule downward capacity
- Reduce out-of-market actions
- Plays an important role in setting up the foundation for EDAM

Price Formation Enhancements initiative will improve pricing provisions for efficient market pricing during tight supply conditions

- Explore scarcity pricing mechanisms to ensure prices incentivize accurate scheduling and bidding that aligns with operational needs
 - Provide strong incentives for resources including storage to align with operational needs
- Explore system-level market power mitigation enhancements
- Explore fast-start pricing
- Explore advisory market interval pricing issues related to storage dispatch and pricing

Resources Sufficiency Evaluation Enhancements - Phase 2 initiative will examine further resource sufficiency evaluation enhancements

- Consequences for failing resource evaluation
- Demand response monitoring
- Further enhancements to account for storage resources
- Intertie uncertainty calculation
- Other potential enhancements

Transmission Services and Market Scheduling Priorities initiative is developing a process forward process to release available CAISO transmission for use by non-CAISO entities

- Considers a holistic, long-term, process for wheel-through transactions to obtain high-priority scheduling rights
- Recognizes the need for, and dependence on, wheeling through CAISO's system to serve external load
- Also considering near-term enhancements to scheduling priority processes

RESOURCE ADEQUACY, TRANSMISSION, DR & DER, AND STORAGE

Resource Adequacy Phase 2 initiative will develop changes to align with day-ahead market enhancements and improve must offer obligation rules

- Day-ahead market enhancements alignment
 - Bid price and must offer obligations changes
 - Flexible resource adequacy
- Enhance must offer obligations for storage and conditionally available resources
 - Bid insertion modifications

Central Procurement Entity Implementation will develop CPUC resource adequacy central buyer related enhancements

- Develop enhancements to accommodate a separate central buyer of resources adequacy resources on behalf of load serving entities

Capacity Procurement Mechanism Enhancements initiative will provide increased assurance of capacity to meet operational needs

- Examine pricing provisions related to the soft offer cap
- Examine procurement authority to align with changing operational needs

Energy Storage Enhancements initiative is developing enhancements to efficiently dispatch storage resources in alignment with operational needs

- Improvements to the existing storage model
- New model for state of charge
- Storage exceptional dispatch provisions to ensure reliable system operations
- Enhancements to the co-located resource model
- Storage dispatch and compensation related topics are also planned to be addressed in the Price Formation initiative

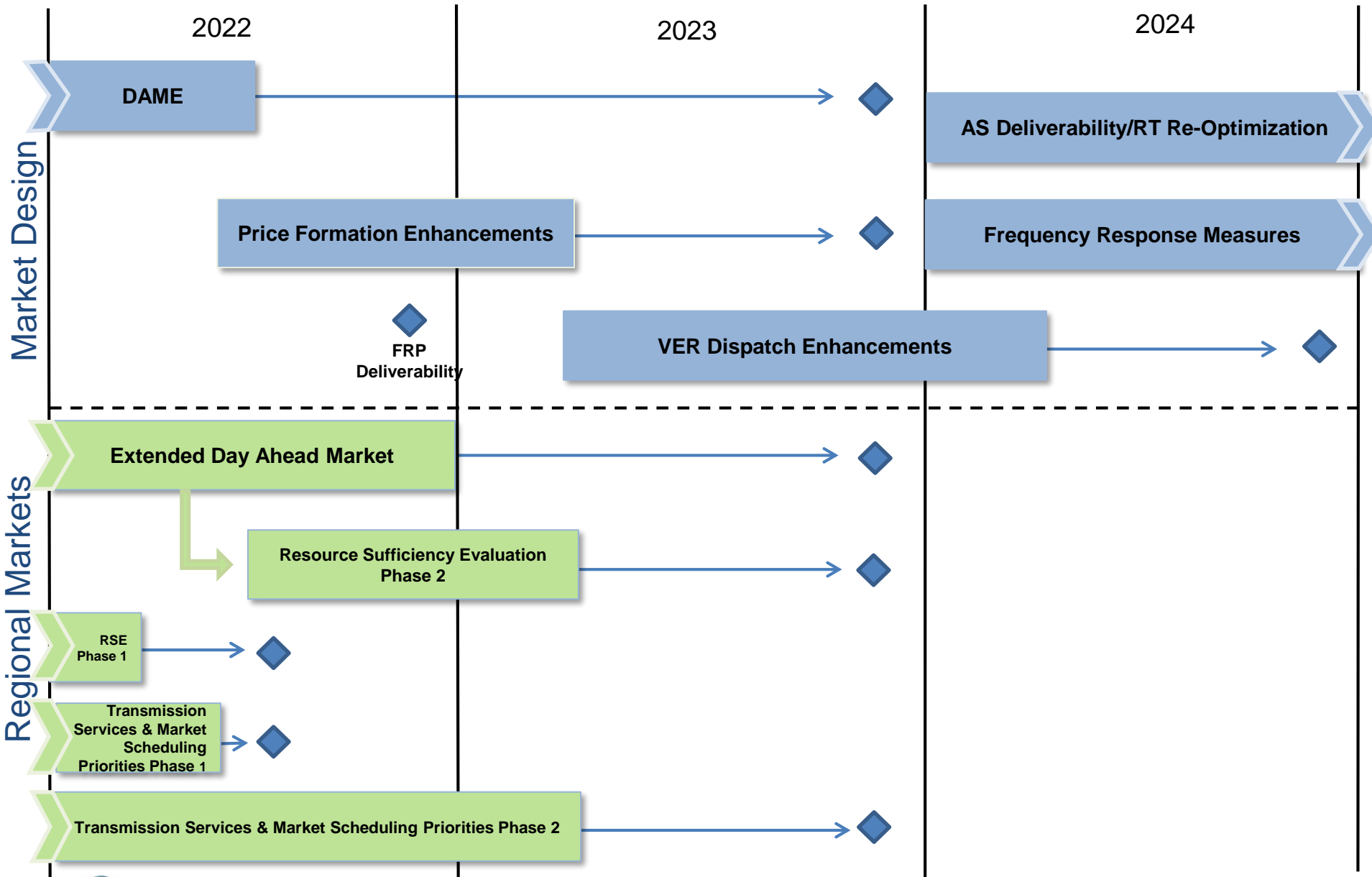
Interconnection Process Enhancements initiative will address a number of issues related to enhancing the Generator Interconnection and Deliverability Allocation Procedures

- Enhancements to incrementally improve the efficacy of the existing processes
- Enhancements to address queue overload
- Broader process reform considerations focusing on aligning the procurement processes

ROADMAP AND ANNUAL PLAN

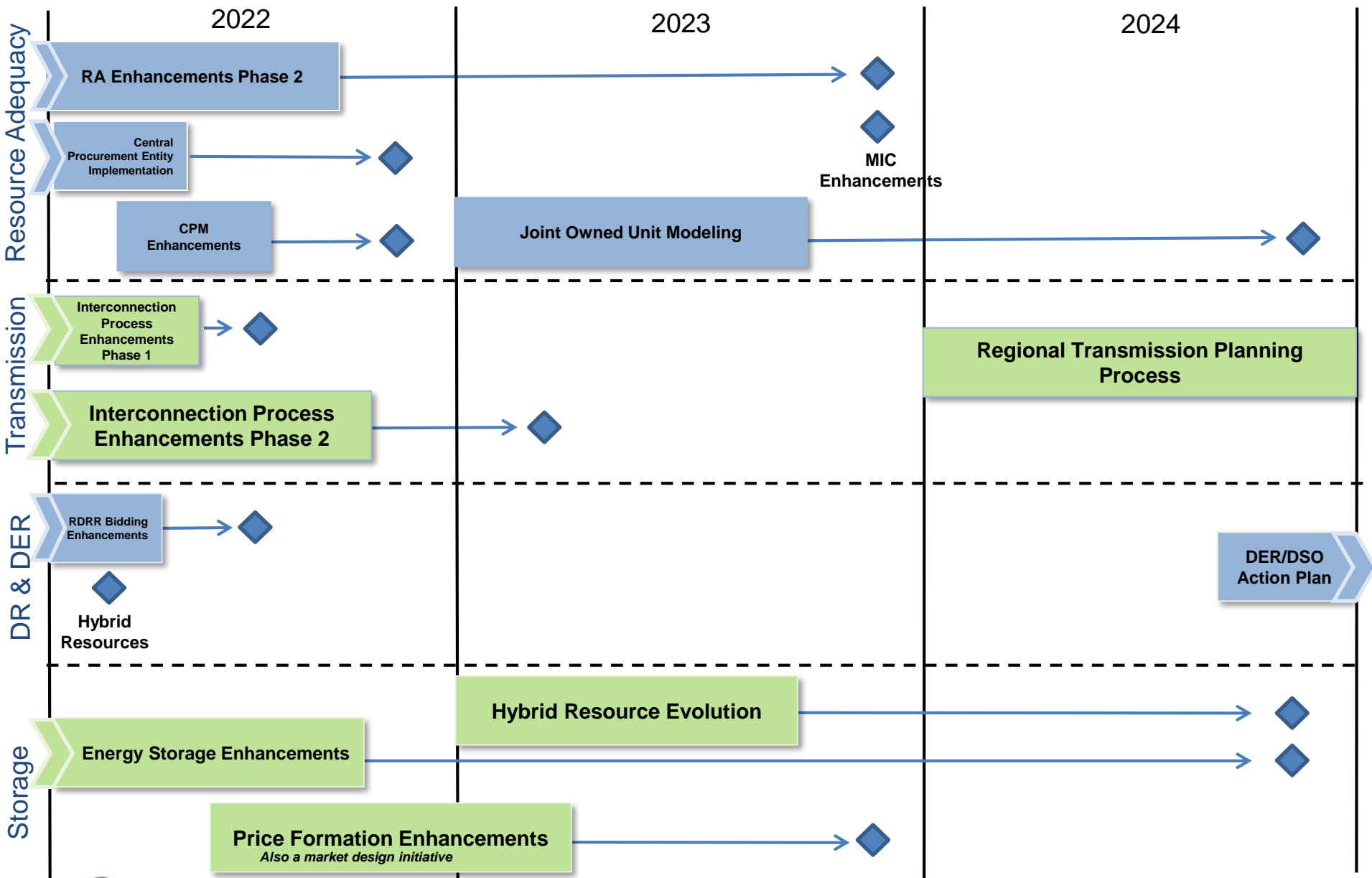
Market Design and Regional Markets

◆ = Implementation

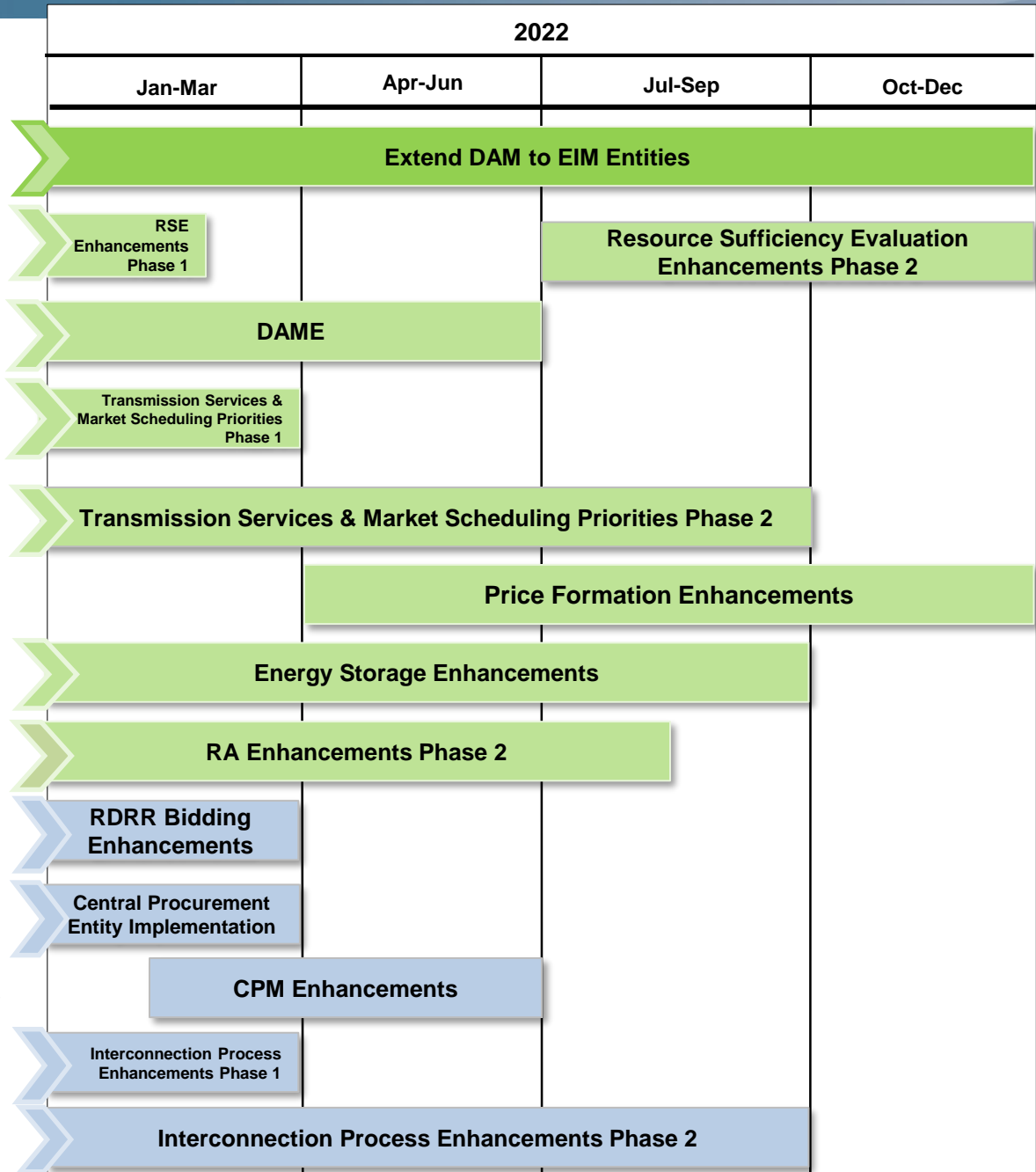


RA, Transmission, DR & DER, and Storage

◆ = Implementation



2022 Draft Annual Plan



■	Major Initiatives
■	Initiatives

**Timeframes are approximate and subject to change*

2022 Policy Initiatives Roadmap process schedule

Date	Milestone
November 11, 2021	Draft Annual Plan and Three-Year Roadmap posted
November 16, 2021	Stakeholder call
December 1, 2021	Stakeholder comments due
January 2022	Final Annual Plan and Three-Year Roadmap posted and stakeholder call
February 9, 2022	Joint EIM Governing Body and CAISO Board of Governors briefing