



California ISO
Shaping a Renewed Future

Renewable Integration Market & Product Review- Phase 2

Market Vision and Roadmap

Market Surveillance Committee Meeting
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Market Design and Regulatory Policy



Overview- Market Vision and Roadmap

- Market Evolution vs. Market Transformation
- Phased Approach:
 - Short-term ➡ (now to 2013)
 - Initiatives already underway
 - Implementation 2011 to 2012
 - Mid-term ➡ (2013 to 2015)
 - Policy development beginning 2011/2012
 - Implementation date based on final design
 - Long-term ➡ (2015 to 2020)
 - Concepts proposed in initial straw proposal
 - Understand impacts of short and mid-term enhancements
 - Consider west wide market developments

Proposed Market Enhancements

Short-term (now to 2013)

Regulation Energy Management	Dynamic Transfers
Flexible Ramping Constraint	Energy Bid Floor
Bid Cost Recovery	PIRP Modifications
72-Hour RUC	VER Forecasting
Start-up and Shut-down Profiles	Enhanced Operating Reserves Management

Mid-term (2013 to 2015)

Flexi-ramp Product	PIRP Resource Dec Bidding
Intertie Pricing & Settlement	Pay for Performance Regulation
Flexible Capacity Forward Procurement	

Long-term (2015 to 2020)

Frequency / Inertia Response	Evaluate Need for RTIS
Real-time Settlement (15-min market)	

Guiding Principles

1. **Technology Agnostic:** The ISO market accommodates new resource types based on their performance capabilities, without preference for specific technologies.
2. **Transparent:** The ISO market relies on price signals to incent participant behaviors that align with ISO operating needs.
3. **Deep and Liquid:** The ISO market attracts robust resource participation.
4. **Durable and Sustainable:** The ISO market ensures an efficient mix of resources to maintain reliability and attracts new investment when and where needed.
5. **Flexible and Scalable:** The ISO market easily adapts to new and changing energy policy goals and resource mix.
6. **Cost-effective and Implementable:** The ISO market design leverages existing ISO infrastructure, industry experiences and lessons learned.
7. **Cost Causation:** The ISO market allocates costs based on cost causation.

MSC Review Topics

- **Cost Allocation under RPS Discussion**
 - Instructed vs. uninstructed energy
 - Ancillary service cost allocation
 - Right Incentives → Right Behavior
- **Flexi-ramp Product Discussion**