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- 17.4.1 Scheduling Deadlines
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  - 19.1.1 Applicability To SCs And Load Serving Entities
  - 19.1.2 Avoiding Duplication
  - 19.1.3 Required Performance
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**21. [Not Used]**

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- 22.1 Audits
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- 22.11 Operating Procedures And BPM Development And Amendment
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- 24.10 Operational Review
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  - 28.1.1 Purpose
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**29. [Not Used]**

**30. Bid And Self-Schedule Submission For All CAISO Markets**

- 30.1 Bids, Including Self-Schedules
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- 30.2 Bid Types
- 30.3 [Not Used]
- 30.4 Election For Start-Up Costs And Minimum Load Costs
- 30.5 Bidding Rules
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- 30.7.7 Format And Validation Of Operational Ramp Rates
- 30.7.8 Format And Validation Of Start-Up And Shut-Down Times
- 30.7.9 Format And Validation Of Start-Up Costs And Shut-Down Costs
- 30.7.10 Format And Validation Of Minimum Load Costs
- 30.8 Bids On Out-Of-Service Paths At Scheduling Points Prohibited

**31. Day-Ahead Market**

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- 31.3 Integrated Forward Market
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  - 31.6.2 Information To Be Published On Secure Communication System
  - 31.6.3 Conditions Permitting CAISO To Abort Day-Ahead Market
  - 31.6.4 Demand Information
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**32. [Not Used]**

**33. Hour-Ahead Scheduling Process (HASP)**

- 33.1 Submission Of Bids For The HASP And RTM
- 33.2 The HASP Optimization
- 33.3 Treatment Of Self-Schedules In HASP
- 33.4 MPM-RRD For The HASP And The RTM
- 33.5 [Not Used]
- 33.6 HASP Results
- 33.7 Ancillary Services in the HASP
- 33.8 HASP Prices For HASP Intertie Schedules
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**34. Real-Time Market**

- 34.1 Inputs To The Real-Time Market
- 34.2 Real-Time Unit Commitment
  - 34.2.1 Commitment Of Fast Start And Short Start Resources
  - 34.2.2 Real-Time Ancillary Services Procurement
- 34.3 Real-Time Dispatch
  - 34.3.1 Real-Time Economic Dispatch
  - 34.3.2 Real-Time Contingency Dispatch
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- 34.4 Short-Term Unit Commitment
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- 34.6 Dispatch of Dispatch to Units, Participating Loads, and PDR
- 34.7 Utilization Of The Energy Bids
- 34.8 Dispatch Of Energy From Ancillary Services
- 34.9 Exceptional Dispatch
  - 34.9.1 System Reliability Exceptional Dispatches
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- 34.10 CAISO Market Adjustment To Non-Priced Quantities In The RTM
  - 34.10.1 Increasing Supply
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- 34.11 Means Of Dispatch Communication
  - 34.11.1 Response Required By Resources To Dispatch Instructions
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- 34.12 Metered Subsystems
- 34.13 Treatment Of Resource Adequacy Capacity In The RTM
- 34.14 Real-Time Activities In The Hour Prior To Settlement Period
  - 34.14.1 Confirm Interchange Transaction Schedules (ITs)
- 34.15 Rules For Real-Time Dispatch Of Imbalance Energy Resources
  - 34.15.1 Resource Constraints
  - 34.15.2 Calculation Of Dispatch Operating Points After Instructions
  - 34.15.3 [Not Used]
  - 34.15.4 Inter-Hour Dispatch Of Resources With Real-Time Energy Bids
  - 34.15.5 Inter-Hour Resources Dispatch Without Real-Time Energy Bids
  - 34.15.6 Intra-Hour Exceptional Dispatches
- 34.16 Ancillary Services In The Real-Time Market
  - 34.16.1 [Not Used]
  - 34.16.2 Dispatch Of Self-Provided Ancillary Services
  - 34.16.3 Ancillary Services Requirements For RTM Dispatch
- 34.17 Dispatch Information And Instructions
  - 34.17.1 Dispatch Information To Be Supplied By The CAISO
  - 34.17.2 Dispatch Information To Be Supplied By SC
  - 34.17.3 Dispatch Information To Be Supplied By UDCs
  - 34.17.4 Dispatch Information To Be Supplied By PTOs
  - 34.17.5 Dispatch Information To Be Supplied By Balancing Authorities
- 34.18 [Not Used]
- 34.19 Pricing Imbalance Energy
  - 34.19.1 General Principles
  - 34.19.2 Determining Real-Time LMPs

**35. Market Validation And Price Correction**

- 35.1 Market Validation
- 35.2 Timing Of The Price Correction Process
- 35.3 Finality Of Prices Subject To The Price Correction Process
- 35.4 Scope Of Price Corrections
- 35.5 Price Correction Methodology
- 35.6 Weekly Price Correction Report

**36. Congestion Revenue Rights**

- 36.1 Overview Of CRRs And Procurement Of CRRs
- 36.2 Types Of CRR Instruments
  - 36.2.1 CRR Obligations
  - 36.2.2 CRR Options
  - 36.2.3 Point-To-Point CRRs
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- 36.2.6 Seasonal CRRs
- 36.2.7 Long Term CRRs
- 36.2.8 Full Funding Of CRRs
- 36.3 CRR Specifications
  - 36.3.1 Quantity
  - 36.3.2 Term
  - 36.3.3 On-Peak And Off-Peak Specifications
- 36.4 FNM For CRR Allocation And CRR Auction
  - 36.4.1 Transmission Capacity For CRR Allocation And CRR Auction
  - 36.4.2 Simultaneous Feasibility
  - 36.4.3 Outages That May Affect CRR Revenue; Scheduling Requirements
- 36.5 Candidate CRR Holder And CRR Holder Requirements
  - 36.5.1 Creditworthiness Requirements
  - 36.5.2 Required Training
- 36.6 [Not Used]
- 36.7 Bilateral CRR Transactions
  - 36.7.1 Transfer Of CRRs
  - 36.7.2 Responsibility Of The CAISO
  - 36.7.3 CRR Holder Reporting Requirement
- 36.8 CRR Allocation
  - 36.8.1 Structure Of The CRR Allocation Process
  - 36.8.2 Load Eligible For CRRs And Eligible CRR Sinks
  - 36.8.3 CRR Allocation Process
  - 36.8.4 Eligible Sources For CRR Allocation
  - 36.8.5 Load Migration Between LSEs
  - 36.8.6 Load Forecasts Used To Calculate CRR MW Eligibility
  - 36.8.7 Long Term CRRs And PTO Withdrawal From CAISO Controlled Grid
- 36.9 CRR Allocation To OBAALSEs
  - 36.9.1 Showing Of Legitimate Need
  - 36.9.2 Prepayment Of Wheeling Access Charges
  - 36.9.3 CRR Eligible Quantities
  - 36.9.4 Eligible CRR Sources And Sinks
  - 36.9.5 Priority Nomination Process
- 36.10 CRR Allocation To Metered Subsystems
- 36.11 CRR Allocation To Merchant Transmission Facilities
  - 36.11.1 Eligibility For Merchant Transmission CRRs
  - 36.11.2 Procedure For Allocating Merchant Transmission CRRs
  - 36.11.3 CRRs Allocated To A Transmission Facility Project Sponsor
- 36.12 [Not Used]
- 36.13 CRR Auction
  - 36.13.1 Scope Of The CRR Auctions
  - 36.13.2 Responsibilities Of The CAISO Prior To Each CRR Auction
  - 36.13.3 CRR Holder Creditworthiness
  - 36.13.4 Bids In The CRR Auctions
  - 36.13.5 Eligible Sources And Sinks For CRR Auction
  - 36.13.6 Clearing Of The CRR Auction
  - 36.13.7 Announcement Of CRR Auction Results
- 36.14 CRR Implications Of New IBAA's Or Modifying Existing IBAA's
  - 36.14.1 Coordination Of IBAA Changes With Release Of CRRs
  - 36.14.2 Modifications To CRR Settlement To Reflect Ibaa Changes
  - 36.14.3 IBAA Change Impact On Adequacy Of Previously-Released CRRs
- 36.15 Firm Transmission Rights Reduction Of Terms

**37. Rules Of Conduct**

- 37.1 Objectives, Definitions, And Scope
  - 37.1.1 Purpose

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- 37.1.2 Objectives
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- 37.1.4 FERC Authority
- 37.1.5 Administration
- 37.2 Comply With Operating Orders
  - 37.2.1 Compliance With Orders Generally
  - 37.2.2 Failure To Curtail Load
  - 37.2.3 Operations & Maintenance Practices
  - 37.2.4 Resource Adequacy Availability
  - 37.2.5 Enhancements And Exceptions
  - 37.2.6 Per Day Limitation On Amount Of Sanctions
- 37.3 Submit Feasible Bids And Submissions To Self-Provide
  - 37.3.1 Bidding Generally
  - 37.3.2 Exceptions
- 37.4 Comply With Availability Reporting Requirements
  - 37.4.1 Reporting Availability
  - 37.4.2 Scheduling And Final Approval Of Outages
  - 37.4.3 Explanation Of Forced Outages
  - 37.4.4 Enhancements And Exceptions
- 37.5 Provide Factually Accurate Information
  - 37.5.1 Accurate Information Generally
  - 37.5.2 Inaccurate Meter Data
- 37.6 Provide Information Required By CAISO Tariff
  - 37.6.1 Required Information Generally
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  - 37.10.2 No Limitation On Other Rights
- 37.11 Method For Calculating Penalties
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**38. Market Monitoring**

**39. Market Power Mitigation Procedures**

- 39.1 Intent Of CAISO Mitigation Measures; Additional FERC Filings
- 39.2 Conditions For The Imposition Of Mitigation Measures
  - 39.2.1 Conduct Inconsistent With Competitive Conduct

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- 39.3 Categories Of Conduct That May Warrant Mitigation
  - 39.3.1 Conduct Regarding Bidding, Scheduling Or Facility Operation
  - 39.3.2 Market Effects Of Rules, Standards, Procedures, Other Items
  - 39.3.3 Using Different Prices In Other Markets Not Uncompetitive
  - 39.3.4 Foregoing Category List Subject To Amendment As Appropriate
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- 39.5 FERC-Ordered Measures
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  - 39.6.1 Maximum Bid Prices
- 39.7 Local Market Power Mitigation For Energy Bids
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  - 39.7.2 Competitive Path Designation
- 39.8 Eligibility For Bid Adder
  - 39.8.1 Bid Adder Eligibility Criteria
  - 39.8.2 New Generating Units
  - 39.8.3 Bid Adder Values
- 39.9 CRR Monitoring And Affiliate Disclosure Requirements
- 39.10 Mitigation Of Exceptional Dispatches Of Resources
  - 39.10.1 Measures For Resources Eligible For Supplemental Revenues
  - 39.10.2 Resources Not Eligible For Supplemental Revenues
  - 39.10.3 Eligibility For Supplemental Revenues
  - 39.10.4 Limitation On Supplemental Revenues
  - 39.10.5 Calculation Of Exceptional Dispatch Supplemental **Revenues**

**40. Resource Adequacy Demonstration For All SCs In The CAISO BAA**

- 40.1 Applicability
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- 40.2 Information Requirements For Resource Adequacy Programs
  - 40.2.1 Reserve Sharing LSEs
  - 40.2.2 Non-CPUC LSEs Electing Reserve Sharing LSE Status
  - 40.2.3 Modified Reserve Sharing LSEs
  - 40.2.4 Load Following MSS
- 40.3 Local Capacity Area Resource Requirements For SCs For LSEs
  - 40.3.1 Local Capacity Technical Study
  - 40.3.2 Allocation Of Local Capacity Area Resource Obligations
  - 40.3.3 Procurement Of Local Capacity Area Resources By LSEs
  - 40.3.4 [Not Used]
- 40.4 General Requirements On Resource Adequacy Resources
  - 40.4.1 Eligible Resources And Determination Of Qualifying Capacity
  - 40.4.2 Net Qualifying Capacity Report
  - 40.4.3 General Qualifications For Supplying Net Qualifying Capacity
  - 40.4.4 Reductions For Testing
  - 40.4.5 Reductions For Performance Criteria
  - 40.4.6 Reductions For Deliverability
  - 40.4.7 Submission Of Supply Plans
- 40.5 Requirements Applying To Modified Reserve Sharing LSEs Only
  - 40.5.1 Day Ahead Scheduling And Bidding Requirements
  - 40.5.2 Demand Forecast Accuracy
  - 40.5.3 Requirement To Make Resources Available In System Emergency
  - 40.5.4 Consequence Of Failure To Meet Scheduling Obligation
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- 40.6 Requirements For SCs And Resources For Reserve Sharing LSEs
  - 40.6.1 Day-Ahead Availability
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  - 40.6.3 Additional Availability Requirements For Short Start Units
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- 40.6.5 Additional Availability Requirements For System Resources
- 40.6.6 Requirements For Partial Resource Adequacy Resources
- 40.6.7 Release Of Long Start Units
- 40.6.8 Use Of Generated Bids
- 40.6.9 Grandfathered Firm Liquidated Damages Contracts Requirements
- 40.6.10 Exports Of Energy From Resource Adequacy Capacity
- 40.6.11 Curtailment Of Exports In Emergency Situations
- 40.6.12 Participating Loads and Proxy Demand Resources
- 40.7 Compliance
  - 40.7.1 Other Compliance Issues
  - 40.7.2 Penalties For Non-Compliance
- 40.8 CAISO Default Qualifying Capacity Criteria
  - 40.8.1 Applicability
- 40.9. Availability Standards And Payment; Non-Availability Charges
  - 40.9.1 General
  - 40.9.2 Exemptions
  - 40.9.3 Availability Assessment Hours
  - 40.9.4 Availability Determinations
  - 40.9.5 Outage Reporting
  - 40.9.6 Non-Availability Charges And Availability Incentive Payments
  - 40.9.7 Assessment For Non Resource-Specific System Resources
  - 40.9.8 Reporting

**41. Procurement Of RMR Generation**

- 41.1 Procurement Of Reliability Must-Run Generation By The CAISO
- 41.2 Designation Of Generating Unit As Reliability Must-Run Unit
- 41.3 Reliability Studies And Determination Of RMR Unit Status
- 41.4 Reliability Must-Run Contracts
- 41.5 RMR Dispatch
  - 41.5.1 Day-Ahead And HASP RMR Dispatch
  - 41.5.2 RMR Payments
  - 41.5.3 RMR Units And Ancillary Services Requirements
- 41.6 Reliability Must-Run Charge
  - 41.6.1 No Offsets To Responsible Utility's CAISO Invoice Payments
  - 41.6.2 Refunds Of Disputed Amounts On RMR Invoices
  - 41.6.3 Time-Frame For Responsible Utility To Dispute RMR Invoices
  - 41.6.4 Disputes After Operational Compliance Review
  - 41.6.5 Invoice Disputes Subject To RMR Contract Resolution Process
  - 41.6.6 RMR Owner's Rights As A Third Party Beneficiary
- 41.7 Responsibility For Reliability Must-Run Charge
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- 41.9 Exceptional Dispatch Of Condition 2 RMR Units
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**42. Adequacy Of Facilities To Meet Operating & Planning Reserve**

- 42.1 Generation Planning Reserve Criteria
  - 42.1.1
  - 42.1.2 Applicable Reliability Criteria Met In Peak Demand
  - 42.1.3 Applicable Reliability Criteria Not Met In Peak Demand
  - 42.1.4 Lowest Cost Bids Satisfying Applicable Reliability Criteria
  - 42.1.5 CAISO To Take Necessary Steps To Ensure Criteria Compliance
  - 42.1.6 Long Term Forecast For Information Purposes
  - 42.1.7 Reliance On Market Forces To Maximum Possible Extent
  - 42.1.8 Allocation Of Costs Incurred By CAISO In Trading Hour To SCs
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**43. Interim Capacity Procurement Mechanism**

- 43.1 Designation
- 43.2 Terms Of ICPM Designation
- 43.3 Selection of Eligible Capacity Under the ICPM
- 43.4 Obligations Of A Resource Designated Under The ICPM
- 43.5 Reports
- 43.6 Payments To Resources Designated Under The ICPM
- 43.7 Allocation Of ICPM Capacity Payment Costs
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**44. Temporary Suspension Of CAISO Tariff**

- 44.1 Authority To Suspend Current Tariff And Revert To Previous
- 44.2 Temporary Suspension Notice Of Effectiveness And Termination
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**Appendix A Definitions**

**Appendix B Pro Forma Agreements**

- Appendix B.1 Scheduling Coordinator Agreement
- Appendix B.2 Participating Generator Agreement
- Appendix B.3 QF Participating Generator Agreement
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- Appendix B.6 MSA For Metered Entities (MSA CAISOME)
- Appendix B.7 Meter Service Agreement For SCs (MSA SC)
- Appendix B.8 Utility Distribution Company OA (UDCOA)
- Appendix B.9 DSHBA Operating Agreement (DSHBAOA)
- Appendix B.10 Small Utility Distribution Co. OA (SUDCOA)
- Appendix B.11 Pro Forma CRR Entity Agreement
- Appendix B.12 MSS Aggregator CRR Entity Agent Agreement
- Appendix B.13 Resource-Specific System Resource Agreement
- Appendix B.14 Proxy Demand Resource Agreement

**Appendix C Locational Marginal Price**

**Appendix D Black Start Generating Units**

**Appendix E Submitted Ancillary Services Data Verification**

**Appendix F Rate Schedules**

**Appendix G Pro Forma Reliability Must-Run Contract**

**Appendix H Grandfathered Metering & Settlement Provisions**

**Appendix I Station Power Protocol**

**Appendix J [Not Used]**

**Appendix K Ancillary Service Requirements Protocol (ASRP)**

**Appendix L Method To Assess Available Transfer Capability**

**Appendix M Procedures For Addressing Parallel Flows**

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

**Appendix N [Not Used]**

**Appendix O CAISO Market Surveillance Committee**

**Appendix P CAISO Department Of Market Monitoring**

**Appendix Q Eligible Intermittent Resources Protocol (EIRP)**

**Appendix R UDP Aggregation Protocol**

**Appendix S Small Generator Interconnection Procedures**

**Appendix T Small Generator Interconnection Agreement**

**Appendix U Large Generator Interconnection Procedures**

**Appendix V Large Generator Interconnection Agreement**

**Appendix W Amendment 39 Interconnection Procedures**

**Appendix X Dynamic Scheduling Protocol (DSP)**

**Appendix Y GIP For Interconnection Requests**

**Appendix Z LGIA For Interconnection Requests Process Under the GIP**

**Appendix AA Transition Plan for Multi-Stage Generating Resources**

**Appendix BB Standard Large Generator Interconnection Agreement for Interconnection  
Requests in a Serial Study Group**

**Appendix CC Large Generator Interconnection Agreement for Interconnection Requests in  
a Queue Cluster Window**