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- 14.4 Market Participant's Indemnity
- 14.5 Limitation On Liability
  - 14.5.1 Liability For Damages
  - 14.5.2 Exclusion Of Certain Types Of Loss
- 14.6 Potomac Economics, Ltd. Limitation Of Liability
- 14.7 Allocation of Reliability-Related Penalty Costs
  - 14.7.1 Overview of Process
  - 14.7.2 Direct Allocation of Reliability Standards Penalties
  - 14.7.3 Indirect Allocation of Reliability-Related Penalty Costs

**15. Regulatory Filings**

**16. Existing Contracts**

- 16.1 Continuation Of Existing Contracts For Non-Participating TOs
  - 16.1.1 Participating TO Obligation
  - 16.1.2 Right To Use And Ownership Of Facilities
  - 16.1.3 Existing Contract Dispute Resolution

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- 16.1.4 Conversion Of PTOs' Rights Under Existing Contracts
- 16.2 [Not Used]
- 16.3 [Not Used]
- 16.4 TRTC Instructions
  - 16.4.1 Responsibility To Create TRTC Instructions
  - 16.4.2 Responsible PTO Re Multiple PTO Parties To Existing Contract
  - 16.4.3 Scheduling Coordinator Responsibilities
  - 16.4.4 Submission Of TRTC Instructions
  - 16.4.5 TRTC Instructions Content
  - 16.4.6 Changes And Updates To TRTC Instructions
  - 16.4.7 Treatment Of TRTC Instructions
  - 16.4.8 CAISO Role In Existing Contracts
  - 16.4.9 Implementation Of TRTC Instructions
- 16.5 Treatment Of Existing Contracts For Transmission Service
  - 16.5.1 System Emergency Exceptions
- 16.6 Valid ETC Self-Schedules
  - 16.6.1 Validation Of ETC Self-Schedules
  - 16.6.2 Treatment Of Invalid ETC Self-Schedules
  - 16.6.3 Treatment Of Valid ETC Self-Schedules
  - 16.6.4 Notification To SCs Of CAISO Determination
- 16.7 [Not Used]
- 16.8 [Not Used]
- 16.9 The HASP
  - 16.9.1 Scheduling Deadlines
- 16.10 The CAISO'S Real-Time Process
- 16.11 Inter-Balancing Authority Area ETC Self-Schedule Bid Changes
- 16.12 Intra-Balancing Authority Area ETC Self-Schedule Changes

**17. Transmission Ownership Rights (TORs)**

- 17.1 TRTC Instructions
  - 17.1.1 Responsibility To Create TRTC Instructions
  - 17.1.2 TOR Scheduling Coordinator Responsibilities
  - 17.1.3 Submission Of TRTC Instructions
  - 17.1.4 TRTC Instructions Content
  - 17.1.5 Changes And Updates To TRTC Instructions
  - 17.1.6 CAISO Role In Accepting TRTC Instructions
  - 17.1.7 Implementation Of TRTC Instructions
- 17.2 Treatment Of TORs
  - 17.2.1 System Emergency Exceptions
- 17.3 Valid TOR Self-Schedules
  - 17.3.1 Validation Of TOR Self-Schedules
  - 17.3.2 Treatment Of Invalid TOR Self-Schedules
  - 17.3.3 Settlement Treatment Of Valid TOR Self-Schedules
  - 17.3.4 Notification To SCs Of CAISO Determination
- 17.4 The HASP
  - 17.4.1 Scheduling Deadlines
- 17.5 The CAISO'S Real-Time Process
- 17.6 Inter-Balancing Authority Area TOR Self-Schedule Bid Changes
- 17.7 Intra-Balancing Authority Area TOR Self-Schedule Changes
- 17.8 Existing Contracts Re TORs For Non-Participating TOs
  - 17.8.1 Participating TO Obligation
  - 17.8.2 Right To Use And Ownership Of TORs
  - 17.8.3 Dispute Resolution For Existing Contracts Applicable To TORs
- 17.9 Conversion Of PTOs' Rights Under Existing Contracts Re TORs
- 17.10 TOR Operational Obligations

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**18. [Not Used]**

**19. [Not Used]**

- 19.1 [Not Used]
  - 19.1.1 [Not Used]
  - 19.1.2 [Not Used]
  - 19.1.3 [Not Used]
- 19.2 [Not Used]

**20. Confidentiality**

- 20.1 CAISO
- 20.2 Confidential Information
- 20.3 Other Parties
- 20.4 Disclosure
- 20.5 Confidentiality

**21. [Not Used]**

**22. Miscellaneous**

- 22.1 Audits
  - 22.1.1 Materials Subject To Audit
  - 22.1.2 CAISO Audit Committee
  - 22.1.3 Audit Results
  - 22.1.4 Availability Of Records
  - 22.1.5 Confidentiality Of Information
  - 22.1.6 Payments
- 22.2 Assignment
- 22.3 Term And Termination
  - 22.3.1 Effective Date Of CAISO Tariff
  - 22.3.2 Termination Of CAISO Tariff With Board And FERC Approval
- 22.4 Notice
  - 22.4.1 Effectiveness
  - 22.4.2 Addresses
  - 22.4.3 Notice Of Changes In Operating Procedures And BPMs
- 22.5 Waiver
- 22.6 Staffing And Training To Meet Obligations
- 22.7 Accounts And Reports
- 22.8 Applicable Law And Forum
- 22.9 Consistency With Federal Laws And Regulations
- 22.10 Administrative Fees
- 22.11 Operating Procedures And BPM Development And Amendment
  - 22.11.1 Process For Revisions Of Business Practice Manuals
  - 22.11.2 Changes To BPM For BPM Change Management
  - 22.11.3 Requests For And Access To Nonpublic Operating Procedures
- 22.12 [Not Used]
- 22.13 Scheduling Responsibilities And Obligations

**23. Categories Of Transmission Capacity**

**24. Comprehensive Transmission Planning Process**

- 24.1 Overview
  - 24.1.1 [Not Used]
  - 24.1.2 [Not Used]
  - 24.1.3 [Not Used]
  - 24.1.4 [Not Used]
- 24.2 Nature of the Transmission Planning Process

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- 24.2.1 [Not Used]
- 24.2.2 [Not Used]
- 24.2.3 [Not Used]
- 24.2.4 [Not Used]
- 24.3 Transmission Planning Process Phase 1
  - 24.3.1 Inputs to the Unified Planning Assumptions and Study Plan
  - 24.3.2 Contents of the Unified Planning Assumptions and Study Plan
  - 24.3.3 Stakeholder Input - Unified Planning Assumptions/Study Plan
  - 24.3.4 Economic Planning Studies
  - 24.3.5 [Not Used]
- 24.4 Transmission Planning Process Phase 2
  - 24.4.1 Conducting Technical Studies
  - 24.4.2 Proposed Reliability Driven Transmission Solutions
  - 24.4.3 Phase 2 Request Window
  - 24.4.4 Comment Period of Conceptual Statewide Plan
  - 24.4.5 Determination of Needed Transmission Solutions
  - 24.4.6 Categories of Transmission Solutions
  - 24.4.7 Description of Transmission Solutions
  - 24.4.8 Additional Contents of Comprehensive Transmission Plan
  - 24.4.9 Phase 2 Stakeholder Process
  - 24.4.10 Transmission Plan Approval Process
- 24.5 Transmission Planning Process Phase 3
  - 24.5.1 Competitive Solicitation Process
  - 24.5.2 Project Sponsor Application and Information Requirements
  - 24.5.3 Project Sponsor and Proposal Qualifications
  - 24.5.4 Project Sponsor Selection Factors and Comparative Analysis
  - 24.5.5 Notice to Project Sponsors
  - 24.5.6 Competitive Solicitation Project Proposal Fee
- 24.6 Obligation to Construct Transmission Solutions
  - 24.6.1 Approved Project Sponsor Reporting Requirements
  - 24.6.2 Delay in the Transmission Solution In-Service Date
  - 24.6.3 Development and Submittal of Mitigation Plans
  - 24.6.4 Inability to Complete the Transmission Solutions
- 24.7 Documentation of Compliance with NERC Reliability Standards
- 24.8 Additional Planning Information
  - 24.8.1 Information Provided by Participating TOs
  - 24.8.2 Information Provided by Participating Generators
  - 24.8.3 Information Requested from Load Serving Entities
  - 24.8.4 Information from Planning Groups, BAAs and Regulators
  - 24.8.5 Obligation to Provide Updated Information
- 24.9 Participating TO Study Obligation
- 24.10 Operational Review and Impact Analysis
- 24.11 [Not Used]
- 24.12 WECC and Regional Coordination
- 24.13 Regional and Sub-Regional Planning Process
  - 24.13.1 Scope of Regional or Sub-Regional Planning Participation
  - 24.13.2 Limitation on Regional Activities
- 24.14 Cost Responsibility for Transmission Additions or Upgrades
  - 24.14.1 Project Sponsor Commitment to Pay Full Cost
  - 24.14.2 Cost of Needed Addition or Upgrade to be Borne by PTO
  - 24.14.3 CRR Entitlement for Project Sponsors not Recovering Costs
  - 24.14.4 RAC Treatment of New Regional Transmission Facilities Costs
- 24.15 Ownership of and Charges for Expansion Facilities
  - 24.15.1 Transmission Additions and Upgrades Under TCA
  - 24.15.2 Access and Charges for Transmission Additions and Upgrades
- 24.16 Expansion by Local Furnishing Participating TOs

**25. Interconnection Of Generating Units And Facilities**

- 25.1 Applicability
  - 25.1.1 Interconnection Request And Generating Unit Requirements
  - 25.1.2 Affidavit Requirement
- 25.2 Interconnections To The Distribution System
- 25.3 Maintenance Of Encumbrances
- 25.4 Asynchronous Generating Facilities

**26. Transmission Rates And Charges**

- 26.1 Access Charges
  - 26.1.1 Publicly Owned Electric Utilities Access Charge
  - 26.1.2 Regional Access Charge Settlement
  - 26.1.3 Disbursement Of RAC Revenues
  - 26.1.4 Wheeling
  - 26.1.5 Unbundled Retail Transmission Rates
- 26.2 [Not Used]
- 26.3 Addition Of New Facilities After CAISO Implementation
- 26.4 Effect On Tax-Exempt Status
- 26.5 [Not Used]
- 26.6 Location Constrained Resource Interconnection Facilities
  - 26.6.1 LCRIFs That Become Network Facilities

**27. CAISO Markets And Processes**

- 27.1 LMPs And Ancillary Services Marginal Prices
  - 27.1.1 Locational Marginal Prices For Energy
  - 27.1.2 Ancillary Service Prices
  - 27.1.3 Regulation Mileage Clearing Price
- 27.2 Load Aggregation Points (LAP)
  - 27.2.1 Metered Subsystems
  - 27.2.2 Determination Of LAP Prices
- 27.3 Trading Hubs
- 27.4 Optimization In The CAISO Markets Processes
  - 27.4.1 Security Constrained Unit Commitment
  - 27.4.2 Security Constrained Economic Dispatch
  - 27.4.3 CAISO Markets Scheduling And Pricing Parameters
- 27.5 Full Network Model
  - 27.5.1 Network Models used in CAISO Markets
  - 27.5.2 Metered Subsystems
  - 27.5.3 Integrated Balancing Authority Areas
  - 27.5.4 Accounting For Changes In Topology In FNM
  - 27.5.5 Load Distribution Factors
  - 27.5.6 Management and Enforcement of Constraints in the CAISO Markets
- 27.6 State Estimator
- 27.7 Constrained Output Generators
  - 27.7.1 Election Of Constrained Output Generator Status
  - 27.7.2 Election To Waive COG Status
  - 27.7.3 Constrained Output Generators In The IFM
  - 27.7.4 Constrained Output Generators In RUC
  - 27.7.5 Constrained Output Generators In The Real-Time Market
- 27.8 Multi-Stage Generating Resources
  - 27.8.1 Registration and Qualification
  - 27.8.2 Informational Requirements
  - 27.8.3 Changes in Status and Configurations of Resource
- 27.9 Non-Generator Resources MWh Constraints
- 27.10 Flexible Ramping Constraint

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**28. Inter-SC Trades**

- 28.1 Inter-SC Trades Of Energy
  - 28.1.1 Purpose
  - 28.1.2 Availability Of Inter-SC Trades Of Energy
  - 28.1.3 Submission Of Inter-SC Trades Of Energy
  - 28.1.4 Information Requirements
  - 28.1.5 General Validation Rules For Inter-SC Trades
  - 28.1.6 Validation Procedures For Physical Trades
- 28.2 Inter-SC Trades Of Ancillary Services
  - 28.2.1 Information Requirements
  - 28.2.2 Validation
  - 28.2.3 Submission Of Inter-SC Trades Of Ancillary Services
- 28.3 Inter-SC Trades Of IFM Load Uplift Obligation
  - 28.3.1 Information Requirements
  - 28.3.2 Validation
  - 28.3.3 Submission Of Inter-SC Trades Of IFM Load Uplift Obligation

**29. [Not Used]**

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

- 30.1 Bids, Including Self-Schedules
  - 30.1.1 Day-Ahead Market
  - 30.1.2 Real-Time Market
- 30.2 Bid Types
- 30.3 [Not Used]
- 30.4 Election For Start-Up Costs And Minimum Load Costs
  - 30.4.1 Start-Up and Minimum Load Costs
  - 30.4.2 Transition Costs
- 30.5 Bidding Rules
  - 30.5.1 General Bidding Rules
  - 30.5.2 Supply Bids
  - 30.5.3 Demand Bids
  - 30.5.4 Wheeling Through Transactions
  - 30.5.5 Scheduling Sourcing/Sinking in Same Balancing Authority Area
- 30.6 Bidding and Scheduling of PDRs and RDRRs
  - 30.6.1 Bidding and Scheduling of PDRs
  - 30.6.2 Bidding and Scheduling of RDRRs
  - 30.6.2 E-Tag Rules and Treatment of Inertie Schedules
  - 30.6.3 Net Benefits Test For Scheduling of PDRs or RDRRs
- 30.7 Bid Validation
  - 30.7.1 Scheduling Coordinator Access
  - 30.7.2 Timing Of CAISO Validation
  - 30.7.3 DAM Validation
  - 30.7.4 RTM Validation
  - 30.7.5 Validation Of ETC Self-Schedules
  - 30.7.6 Validation And Treatment Of Ancillary Services Bids
  - 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
- 30.9 Virtual Bids
  - 30.9.1 Virtual Bid Components
- 30.10 Use of AC Solution and Nodal Constraints

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**31. Day-Ahead Market**

- 31.1 Bid Submission And Validation In The Day-Ahead Market
- 31.2 Day-Ahead MPM Process
  - 31.2.1 The Market Power Mitigation Process
  - 31.2.2 Bid Mitigation for RMR Units
  - 31.2.3 Bid Mitigation for Non-RMR Units
- 31.3 Integrated Forward Market
  - 31.3.1 Market Clearing And Price Determination
  - 31.3.2 Congestion And Transmission Losses Cost Determination
  - 31.3.3 Metered Subsystems
- 31.4 CAISO Market Adjustments To Non-Priced Quantities In The IFM
- 31.5 Residual Unit Commitment
  - 31.5.1 RUC Participation
  - 31.5.2 Metered Subsystem RUC Obligation
  - 31.5.3 RUC Procurement Target
  - 31.5.4 RUC Procurement Constraints
  - 31.5.5 Selection And Commitment Of RUC Capacity
  - 31.5.6 Eligibility For RUC Compensation
  - 31.5.7 Rescission Of Payments For RUC Capacity
- 31.6 Timing Of Day-Ahead Scheduling
  - 31.6.1 Criteria For Temporary Waiver Of Timing Requirements
  - 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 [Not Used]
- 31.7 Extremely Long-Start Commitment Process
- 31.8 Constraints Enforced at Intertie Scheduling Points

**32. [Not Used]**

**33. [Not Used]**

**34. Real-Time Market**

- 34.1 Inputs To The Real-Time Market
  - 34.1.1 Day-Ahead Market Results as Inputs to RTM
  - 34.1.2 Market Model and System Information
  - 34.1.3 Bids in the Real-Time Market
  - 34.1.4 Real-Time Validation of Schedules and Bids
  - 34.1.5 Mitigating Bids in the RTM
  - 34.1.6 Eligible Intermittent Resources Forecast
- 34.2 The Hour-Ahead Scheduling Process
  - 34.2.1 The HASP Optimization
  - 34.2.2 Treatment of Self-Schedules in HASP
  - 34.2.3 Ancillary Services in the HASP and FMM
  - 34.2.4 HASP Results
  - 34.2.5 Cessation of the HASP
- 34.3 Real-Time Unit Commitment
  - 34.3.1 RTUC Optimization
  - 34.3.2 Commitment Of Fast Start And Short Start Units
- 34.4 Fifteen Minute Market
  - 34.4.1 Real-Time Ancillary Services Procurement
- 34.5 Real-Time Dispatch
  - 34.5.1 Real-Time Economic Dispatch
  - 34.5.2 Real-Time Contingency Dispatch
  - 34.5.3 Real-Time Manual Dispatch
- 34.6 Short-Term Unit Commitment
- 34.7 General Dispatch Principles
- 34.8 Dispatch Instructions to Units, Participating Loads, and PDRs, and RDRRs



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- 34.9 Utilization Of The Energy Bids
- 34.10 Dispatch Of Energy From Ancillary Services
- 34.11 Exceptional Dispatch
  - 34.11.1 System Reliability Exceptional Dispatches
  - 34.11.2 Other Exceptional Dispatch
  - 34.11.3 Transmission-Related Modeling Limitations
  - 34.11.4 Reporting Requirements
- 34.12 CAISO Market Adjustment To Non-Priced Quantities In The RTM
  - 34.12.1 Increasing Supply
  - 34.12.2 Decreasing Supply
- 34.13 Means Of Dispatch Communication
  - 34.13.1 Response Required By Resources To Dispatch Instructions
  - 34.13.2 Failure To Conform To Dispatch Instructions
- 34.14 Metered Subsystems
- 34.15 Treatment Of Resource Adequacy Capacity In The RTM
- 34.16 Real-Time Activities In The Hour Prior To Settlement Period
  - 34.16.1 Confirm Interchange Transaction Schedules (ITs)
- 34.17 Rules For Real-Time Dispatch Of Imbalance Energy Resources
  - 34.17.1 Resource Constraints
  - 34.17.2 Calculation Of Dispatch Operating Points After Instructions
  - 34.17.3 [Not Used]
  - 34.17.4 Inter-Hour Dispatch Of Resources With Real-Time Energy Bids
  - 34.17.5 Inter-Hour Resources Dispatch Without Real-Time Energy Bids
  - 34.17.6 Intra-Hour Exceptional Dispatches
- 34.18 Real-Time Dispatch of RDRRs
  - 34.18.1 Testing of RDRRs
- 34.18 Ancillary Services In The Real-Time Market
  - 34.18.1 Dispatch Of Self-Provided Ancillary Services
  - 34.18.2 Ancillary Services Requirements For RTM Dispatch
- 34.19 Dispatch Information And Instructions
  - 34.19.1 Dispatch Information To Be Supplied By The CAISO
  - 34.19.2 Dispatch Information To Be Supplied By SC
  - 34.19.3 Dispatch Information To Be Supplied By UDCs
  - 34.19.4 Dispatch Information To Be Supplied By PTOs
  - 34.19.5 Dispatch Information To Be Supplied By Balancing Authorities
- 34.20 Pricing Imbalance Energy
  - 34.20.1 General Principles
  - 34.20.2 Determining Real-Time LMPs
- 34.21 Temporary Waiver of Timing Requirements for RTM
  - 34.21.1 Criteria for Temporary Waiver of Timing Requirements
  - 34.21.2 Information to be Published on Secure Communication System

**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
  - 35.3.1 Price Corrections and Changes Pursuant to FERC Orders
  - 35.3.2 Processing and Publication Issues
- 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

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- 36.2.2 CRR Options
- 36.2.3 Point-To-Point CRRs
- 36.2.4 [Not Used]
- 36.2.5 Monthly CRRs
- 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 Reconfiguration of CRRs
- 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

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36.15 [Not Used]

**37. Rules Of Conduct**

- 37.1 Objectives, Definitions, And Scope
  - 37.1.1 Purpose
  - 37.1.2 Objectives
  - 37.1.3 Application Of Other Remedies
  - 37.1.4 [Not Used]
  - 37.1.5 Administration
- 37.2 Comply With Operating Orders
  - 37.2.1 Compliance With Orders Generally
  - 37.2.2 [Not Used]
  - 37.2.3 Operations & Maintenance Practices
  - 37.2.4 Resource Adequacy Availability
  - 37.2.5 [Not Used]
  - 37.2.6 [Not Used]
- 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 [Not Used]
  - 37.5.2 Inaccurate or Late Actual SQMD
- 37.6 Provide Information Required By CAISO Tariff
  - 37.6.1 Required Information Generally
  - 37.6.2 Investigation Information
  - 37.6.3 Audit Materials
  - 37.6.4 Review By FERC
- 37.7 [Not Used]
- 37.8 Process For Investigation And Enforcement
  - 37.8.1 Purpose; Scope
  - 37.8.2 Referrals To FERC
  - 37.8.3 Investigation
  - 37.8.4 Notice
  - 37.8.5 Opportunity To Present Evidence
  - 37.8.6 Results Of Investigation
  - 37.8.7 Statement Of Findings And Conclusions
  - 37.8.8 Officer Representative
  - 37.8.9 Record Of Investigation
  - 37.8.10 Review Of Determination
- 37.9 Administration Of Sanctions
  - 37.9.1 Assessment; Waivers And Adjustments
  - 37.9.2 [Not Used]
  - 37.9.3 Settlement
  - 37.9.4 Disposition Of Proceeds
- 37.10 Miscellaneous
  - 37.10.1 Time Limitation
  - 37.10.2 No Limitation On Other Rights
- 37.11 Method For Calculating Penalties
  - 37.11.1 Inaccurate or Late Actual SQMD Penalty
  - 37.11.2 Inaccurate Actual SQMD Penalty Without Recal. Sett. Stmt.

### **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
- 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
- 39.4 Sanctions For Physical Withholding
- 39.5 FERC-Ordered Measures
- 39.6 Rules Limiting Certain Energy, AS, And RUC Bids
  - 39.6.1 Maximum Bid Prices
- 39.7 Local Market Power Mitigation For Energy Bids
  - 39.7.1 Calculation Of Default Energy Bids
  - 39.7.2 Competitive Path Designation
  - 39.7.3 Default Competitive Path Designations
- 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
- 39.11 Market Power Mitigation Applicable to Virtual Bidding
  - 39.11.1 Affiliate Disclosure Requirements
  - 39.11.2 Monitoring of Virtual Bidding Activity

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

- 40.1 Applicability
  - 40.1.1 Election Of Load Serving Entity Status
- 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

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- 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
- 40.5.5 Substitution Of Resources
- 40.6 Requirements For SCs And Resources For Reserve Sharing LSEs
  - 40.6.1 Day-Ahead Availability
  - 40.6.2 Real-Time Availability
  - 40.6.3 Additional Availability Requirements For Short Start Units
  - 40.6.4 Use-Limited Resources Additional Availability Requirements
  - 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, PDRs, and RDRRs
- 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 NRS-RA 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 RTM 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
- 41.8 Responsibility For RMR Charges Associated With SONGS
- 41.9 Exceptional Dispatch Of Condition 2 RMR Units
  - 41.9.1 Notification Required Before Condition 2 RMR Unit Dispatch

**42. Adequacy Of Facilities To Meet Operating & Planning Reserve**

- 42.1 Generation Planning Reserve Criteria
  - 42.1.1

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- 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
- 42.1.9 Costs For Difference In Schedules And Real-Time Deviations

**43. Capacity Procurement Mechanism**

- 43.1 Interim Capacity Procurement Mechanism
  - 43.1.1 Capacity Procurement Mechanism Expiration
- 43.2 Capacity Procurement Mechanism Designation
  - 43.2.1 SC Failure To Show Sufficient Local Capacity Area Resources
  - 43.2.2 Collective Deficiency In Local Capacity Area Resources
  - 43.2.3 SC Failure To Show Sufficient Resource Adequacy Resources
  - 43.2.4 CPM Significant Events
  - 43.2.5 Exceptional Dispatch CPM
  - 43.2.6 Capacity At Risk Of Retirement Needed For Reliability
- 43.3 Terms of CPM Designation
  - 43.3.1 SC Annual Plan Failure To Show Local Capacity Area Resources
  - 43.3.2 SC Month Plan Failure To Show Local Capacity Area Resources
  - 43.3.3 Annual Plan Collective LCA Resources Insufficient
  - 43.3.4 SC Failure To Show Sufficient Resource Adequacy Resources
  - 43.3.5 Term – CPM Significant Event
  - 43.3.6 Term – Exceptional Dispatch CPM
  - 43.3.7 Term - Capacity At Risk Of Retirement Needed For Reliability
- 43.4 Selection of Eligible Capacity Under The CPM
- 43.5 Obligations of a Resource Designated Under The CPM
  - 43.5.1 Availability Obligations
  - 43.5.2 Obligation To Provide Capacity And Termination
- 43.6 Reports
  - 43.6.1 CPM Designation Market Notice
  - 43.6.2 Designation Of A Resource Under The CPM
  - 43.6.3 Non-Market And Repeated Market Commitment Of Non-RA Capacity
  - 43.6.4 [Not Used]
- 43.7 Payments To Resources Designated Under The CPM
  - 43.7.1 Monthly CPM Capacity Payment
  - 43.7.2 Resource-Specific CPM Capacity Payment
  - 43.7.3 Market Payments
- 43.8 Allocation Of CPM Capacity Payment Costs
  - 43.8.1 LSE Shortage Of Local Capacity Area Resources In Annual Plan
  - 43.8.2 LSE Shortage Of Local Capacity Area Resources In Month Plan
  - 43.8.3 Collective Deficiency In Local Capacity Area Resources
  - 43.8.4 LSE Shortage Of Demand Or Reserve Margin Requirement In Plan
  - 43.8.5 Allocation Of CPM Significant Event Costs
  - 43.8.6 Allocation Of Exceptional Dispatch CPMs
  - 43.8.7 Allocation of CPM Costs For Resources At Risk of Retirement
- 43.9 Crediting Of CPM Capacity
- 43.10 [Not Used]

**44. [Not Used]**

- 44.1 [Not Used]
- 44.2 [Not Used]
- 44.3 [Not Used]

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<b>Appendix A</b>	<b>Definitions</b>
<b>Appendix B</b>	<b>Pro Forma Agreements</b>
	Appendix B.1 Scheduling Coordinator Agreement
	Appendix B.2 Participating Generator Agreement
	Appendix B.3 Net Scheduled Participating Generator Agreement
	Appendix B.4 Participating Load Agreement
	Appendix B.5 Dynamic Scheduling Agreement For SCs
	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 Demand Response Provider Agreement
	Appendix B.15 Convergence Bidding Entity Agreement
	Appendix B.16 Pseudo-Tie Participating Generator Agreement
<b>Appendix C</b>	<b>Locational Marginal Price</b>
<b>Appendix D</b>	<b>Black Start Generating Units</b>
<b>Appendix E</b>	<b>Submitted Ancillary Services Data Verification</b>
<b>Appendix F</b>	<b>Rate Schedules</b>
<b>Appendix G</b>	<b>Pro Forma Reliability Must-Run Contract</b>
<b>Appendix H</b>	<b>Grandfathered Metering &amp; Settlement Provisions</b>
<b>Appendix I</b>	<b>Station Power Protocol</b>
<b>Appendix J</b>	<b>Grandfathered Metering and Settlement Provisions for Trading Days Prior to October 1, 2011</b>
<b>Appendix K</b>	<b>Ancillary Service Requirements Protocol (ASRP)</b>
<b>Appendix L</b>	<b>Method To Assess Available Transfer Capability</b>
<b>Appendix M</b>	<b>Dynamic Scheduling Protocol (DSP)</b>
<b>Appendix N</b>	<b>Pseudo-Tie Protocol</b>
<b>Appendix O</b>	<b>CAISO Market Surveillance Committee</b>
<b>Appendix P</b>	<b>CAISO Department Of Market Monitoring</b>
<b>Appendix Q</b>	<b>Eligible Intermittent Resources Protocol (EIRP)</b>
<b>Appendix R</b>	<b>UDP Aggregation Protocol</b>
<b>Appendix S</b>	<b>Small Generator Interconnection Procedures</b>

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<b>Appendix T</b>	<b>Small Generator Interconnection Agreement</b>
<b>Appendix U</b>	<b>Large Generator Interconnection Procedures</b>
<b>Appendix V</b>	<b>Large Generator Interconnection Agreement</b>
<b>Appendix W</b>	<b>Amendment 39 Interconnection Procedures</b>
<b>Appendix X</b>	<b>[Not Used]</b>
<b>Appendix Y</b>	<b>GIP For Interconnection Requests</b>
<b>Appendix Z</b>	<b>LGIA For Interconnection Requests Process Under the GIP</b>
<b>Appendix AA</b>	<b>[Not Used]</b>
<b>Appendix BB</b>	<b>Standard Large Generator Interconnection Agreement for Interconnection Requests in a Serial Study Group</b>
<b>Appendix CC</b>	<b>Large Generator Interconnection Agreement for Interconnection Requests in a Queue Cluster Window</b>
<b>Appendix DD</b>	<b>Generator Interconnection and Deliverability Allocation Procedures (GIDAP)</b>
<b>Appendix EE</b>	<b>Large Generator Interconnection Agreement for Interconnection Requests Processed under the Generator Interconnection and Deliverability Allocation Procedures</b>
<b>Appendix FF</b>	<b>Small Generator Interconnection Agreement for Interconnection Requests Processed Under the Generator Interconnection and Deliverability Allocation Procedures</b>
<b>Appendix GG</b>	<b>One-Time Interconnecting Generator Downsizing Opportunity</b>
<b>Appendix HH</b>	<b>Generation Interconnection Agreement Amendment Re: Generator Downsizing</b>
<b>Appendix II</b>	<b>Market-Based Rate Authority Suspension</b>