

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

(Open Access Transmission Tariff)

Effective as of September 24, 2018

Table of Contents

- 1. Definitions and Interpretation**
 - 1.1 General Provisions of Article I Applicable To CAISO Tariff
 - 1.2 Definitions
 - 1.3 Rules of Interpretation
 - 1.3.1 “Includes” Means “Including Without Limitation”
 - 1.3.2 Specific Rules of Interpretation Subject to Context
- 2. Access to the CAISO Controlled Grid**
 - 2.1 Open Access
 - 2.2 Customer Eligibility for Direct Access or Wholesale Sales
- 3. Local Furnishing, Other Tax Exempt Bond Facility Financing**
- 4. Roles and Responsibilities**
 - 4.1 [Not Used]
 - 4.2 Market Participant Responsibilities
 - 4.2.1 Comply with Dispatch Instructions and Operating Orders
 - 4.2.2 Implementation of Instructions
 - 4.3 Relationship between CAISO and Participating TOs
 - 4.3.1 Nature of Relationship
 - 4.4 Relationship Between CAISO and UDCs
 - 4.4.1 General Nature of Relationship Between CAISO and UDCs
 - 4.4.2 UDC Responsibilities
 - 4.4.3 System Emergency Reports: UDC Obligations
 - 4.4.4 Coordination of Expansion or Modifications to UDC Facilities
 - 4.4.5 Information Sharing
 - 4.4.6 Installation of and Rights of Access to UDC Facilities
 - 4.4.7 Provision of Information for CRRs to Reflect Load Migration
 - 4.4.8 UDC Facilities Under CAISO Control
 - 4.5 Responsibilities of a Scheduling Coordinator
 - 4.5.1 Scheduling Coordinator Certification
 - 4.5.2 Eligible Customers and Convergence Bidding Entities
 - 4.5.3 Responsibilities of a Scheduling Coordinator
 - 4.5.4 Operations of a Scheduling Coordinator
 - 4.6 Relationship Between CAISO and Generators
 - 4.6.1 General Responsibilities
 - 4.6.2 [Not Used]
 - 4.6.3 Requirements for Certain Participating Generators
 - 4.6.4 Identification of Generating Units
 - 4.6.5 NERC and WECC Requirements
 - 4.6.6 Forced Outages
 - 4.6.7 Recordkeeping; Information Sharing
 - 4.6.8 Sharing Information on Reliability of CAISO Controlled Grid
 - 4.6.9 Access Right
 - 4.6.10 RMTMax for CHP Resources
 - 4.7 Relationship Between CAISO and Participating Loads
 - 4.8 Relationships Between CAISO and Intermittent Resources
 - 4.8.1 Bidding and Settlement
 - 4.8.2 Forecasting
 - 4.8.3 PIRP Protective Measures
 - 4.9 Metered Subsystems
 - 4.9.1 General Nature of Relationship Between CAISO and MSS
 - 4.9.2 Coordination of Operations
 - 4.9.3 Coordinating Maintenance Outages of MSS Facilities

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 4.9.4 MSS Operator Responsibilities
- 4.9.5 Scheduling by or on Behalf of a MSS Operator
- 4.9.6 System Emergencies
- 4.9.7 Coordination of Expansion or Modification to MSS Facilities
- 4.9.8 Ancillary Services Obligations for MSS
- 4.9.9 [Not Used]
- 4.9.10 Information Sharing
- 4.9.11 Installation of and Rights of Access to MSS Facilities
- 4.9.12 MSS System Unit
- 4.9.13 MSS Elections and Participation in CAISO Markets
- 4.10 Candidate CRR Holder and CRR Holder Registration
 - 4.10.1 Procedure to Become a Candidate CRR Holder
 - 4.10.2 Ongoing Obligations after Registration and Qualifications
 - 4.10.3 Termination of a CRR Entity Agreement
- 4.11 Relationship Between CAISO and SUDCs
 - 4.11.1 General Nature of Relationship Between CAISO and SUDCs
 - 4.11.2 Coordinating Maintenance Outages of SUDC Facilities
 - 4.11.3 SUDC Responsibilities
 - 4.11.4 System Emergencies
 - 4.11.5 Load Reduction
 - 4.11.6 System Emergency Reports: SUDC Obligations
 - 4.11.7 Coordinating Expansion or Modifications to SUDC Facilities
 - 4.11.8 Information Sharing
 - 4.11.9 Equipment Installation and Access Rights to SUDC Facilities
- 4.12 Relationship of CAISO and Resource-Specific System Resources
 - 4.12.1 General Responsibilities
 - 4.12.2 Identification of Resource-Specific System Resources
 - 4.12.3 Telemetry Data to Demonstrate Compliance
 - 4.12.4 Recordkeeping
 - 4.12.5 Access Rights
- 4.13 DRPs, RDRRs, and PDRs
 - 4.13.1 Relationship Between CAISO and DRPs
 - 4.13.2 Applicable Requirements for RDRRs, PDRs and DRPs
 - 4.13.3 Identification of RDRRs and PDRs
 - 4.13.4 Performance Evaluation Methodologies for PDRs and RDRRs
 - 4.13.5 Characteristics of PDRs and PDRRs
- 14.4 Relationship Between the CAISO and CBEs
 - 4.14.1 Procedure to Become a Convergence Bidding Entity
 - 4.14.2 Convergence Bidding Entity's Ongoing Obligations
 - 4.14.3 Termination of a Convergence Bidding Entity Agreement
- 4.15 Relationships Between CAISO and Pseudo-Ties to CAISO
- 4.16 Relationships Between CAISO and Pseudo-Ties Out
- 4.17 Distributed Energy Resource Aggregations
 - 4.17.1 CAISO Relationship with Distributed Energy Resource Providers
 - 4.17.2 Responsibilities of Distributed Energy Resource Providers
 - 4.17.3 Requirements for Distributed Energy Resource Aggregations
 - 4.17.4 Identification of Distributed Energy Resources
 - 4.17.5 Characteristics of Distributed Energy Resource Aggregations
 - 4.17.6 Operating Requirements

5. Black Start and System Restoration

- 5.1 Black Start Capability
- 5.2 Black Start Units
- 5.3 Black Start Services

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

6. Communications

- 6.1 Methods of Communication
 - 6.1.1 Full-Time Communications Facility Requirements
 - 6.1.2 Information Transfer from Scheduling Coordinator to CAISO
 - 6.1.3 Submitting Information to the Secure Communication System
 - 6.1.4 Information Transfer from CAISO to Scheduling Coordinator
 - 6.1.5 Information to be Provided by Connected Entities to CAISO
- 6.2 CAISO's Secure Communication System
 - 6.2.1 Scheduling Coordinators
 - 6.2.2 Public Market Information
- 6.3 Communication of Dispatch Instruction
 - 6.3.1 SC Responsibility for Communications to Generator or Load
 - 6.3.2 Recording of Dispatch Instructions
 - 6.3.3 Contents of Dispatch Instructions
- 6.4 Communication of Operating Orders
- 6.5 CAISO Communications
 - 6.5.1 Communication with Market and CRR Participants and Public
 - 6.5.2 Communications Prior to the Day-Ahead Market
 - 6.5.3 Day-Ahead Market Communications
 - 6.5.4 RTM Communications Before the Trading Hour
 - 6.5.5 Real-Time Market Communications During the Trading Hour
 - 6.5.6 Market Bid Information
 - 6.5.7 Monthly Report on Conforming Transmission Constraints
 - 6.5.8 Virtual Award Information
 - 6.5.9 Transmission Flowgate Constraint Information
 - 6.5.10 Protected Communications with Market Participants
 - 6.5.11 Aggregate Generation Outage Data
 - 6.5.12 Wind and Solar Forecast and Output

7. System Operations Under Normal and Emergency Conditions

- 7.1 CAISO Control Center Operations
 - 7.1.1 Maintain CAISO Control Center
 - 7.1.2 Maintain Back-Up Control Facility
 - 7.1.3 CAISO Control Center Authorities
- 7.2 Operating Reliability Criteria
- 7.3 Transmission Planning Authority
 - 7.3.1 Criteria for CAISO's Operational Control
 - 7.3.2 Planning Guidelines; Revision of Local Reliability Criteria
 - 7.3.3 NAESB Standards
- 7.4 General Standard of Care
- 7.5 Routine Operation of the CAISO Controlled Grid
 - 7.5.1 CAISO Controlled Facilities
 - 7.5.2 Clearing Equipment for Work
 - 7.5.3 Equipment De-Energized for Work
 - 7.5.4 Hot-Line Work
 - 7.5.5 Intertie Switching
 - 7.5.6 Operating Voltage Control Equipment
- 7.6 Normal System Operations
 - 7.6.1 Actions for Maintaining Reliability of CAISO Controlled Grid
- 7.7 Management of Abnormal System Conditions
 - 7.7.1 CAISO Actions in Imminent or Actual System Emergency
 - 7.7.2 Market Participant Responsibilities in System Emergencies.
 - 7.7.3 Suspension of CAISO Markets and Application of Administrative Price.
 - 7.7.4 Preparatory Actions for a System Emergency
 - 7.7.5 Actions Subsequent to a System Emergency
 - 7.7.6 System Operations in the Event of a Market Disruption

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 7.7.7 Removal of Bids in the Event of a Market Disruption, to Prevent a Market Disruption, or to Minimize the Extent of a Market Disruption
- 7.7.8 Under Frequency Load Shedding (UFLS).
- 7.7.9 Application of Administration Prices and Use of Prior Market Results
- 7.7.10 CAISO Facility and Equipment Outage
- 7.7.11 [Not Used]
- 7.7.12 [Not Used]
- 7.7.13 [Not Used]
- 7.7.14 [Not Used]
- 7.7.15 [Not Used]
- 7.8 Management of Overgeneration Conditions
 - 7.8.1 Dispatch Instructions to Reduce Generation and Imports
 - 7.8.2 Notification of Projected Overgeneration to be Mitigated
 - 7.8.3 Energy Offered for Sale to Adjacent Balancing Authorities
 - 7.8.4 Instructions to SCs to Reduce Generation or Imports
 - 7.8.5 Mandatory Dispatch Instructions for Specific Reductions
 - 7.8.6 CAISO Costs to be Reimbursed Proportionately by SCs
- 7.9 Suspension or Limitation of Virtual Bidding
 - 7.9.1 Suspension or Limitation Generally
 - 7.9.2 Reasons for Suspension or Limitation
 - 7.9.3 Procedures Regarding Suspension or Limitation

8. Ancillary Services

- 8.1 Scope
- 8.2 Ancillary Services Standards
 - 8.2.1 Determination of Ancillary Service Standards
 - 8.2.2 Time-Frame for Revising Ancillary Service Standards
 - 8.2.3 Quantities of Ancillary Services Required; Use of AS Regions
- 8.3 Procurement; Certification and Testing; Contracting Period
 - 8.3.1 Procurement of Ancillary Services
 - 8.3.2 Procurement from Internal and External Resources
 - 8.3.3 Ancillary Service Regions and Regional Limits
 - 8.3.4 Certification and Testing Requirements
 - 8.3.5 Daily and Hourly Procurement
 - 8.3.7 AS Bidding Requirements
 - 8.3.8 Procurement of Voltage Support
- 8.4 Technical Requirements for Providing Ancillary Services
 - 8.4.1 Operating Characteristics Required to Provide AS
 - 8.4.2 Ancillary Service Control Standards
 - 8.4.3 Ancillary Service Capability Standards
 - 8.4.4 Ancillary Service Availability Standards
 - 8.4.5 Communication Equipment
 - 8.4.6 Metering Infrastructure
- 8.5 Time Frame to Submit and Evaluate Ancillary Service Bids
- 8.6 Obligations for and Self-Provision of Ancillary Services
 - 8.6.1 Ancillary Service Obligations
 - 8.6.2 Right to Self-Provide
 - 8.6.3 Services which may be Self-Provided
 - 8.6.4 Time Frame for Informing CAISO of Self-Provision
- 8.7 Ancillary Service Awards
- 8.8 [Not Used]
- 8.9 Verification, Compliance Testing, and Auditing
 - 8.9.1 Compliance Testing for Spinning Reserve
 - 8.9.2 Compliance Testing for Regulation
 - 8.9.3 Compliance Testing for Non-Spinning Reserve
 - 8.9.4 Compliance Testing for Voltage Support

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 8.9.5 [Not Used]
- 8.9.6 [Not Used]
- 8.9.7 Consequences of Failure to Pass Compliance Testing
- 8.9.8 Performance Audits for Standard Compliance
- 8.9.9 Performance Audit for Regulation
- 8.9.10 Performance Audit for Spinning Reserve
- 8.9.11 Performance Audit for Non-Spinning Reserve
- 8.9.12 [Not Used]
- 8.9.13 [Not Used]
- 8.9.14 [Not Used]
- 8.9.15 Consequences of Failure to Pass Performance Audit
- 8.9.16 Sanctions for Poor Performance
- 8.10 Periodic Testing of Units
 - 8.10.1 Regulation Up and Regulation Down Reserves
 - 8.10.2 Spinning Reserve
 - 8.10.3 Non-Spinning Reserve
 - 8.10.4 Voltage Support
 - 8.10.5 [Not Used]
 - 8.10.6 [Not Used]
 - 8.10.7 Penalties for Failure to Pass Tests
 - 8.10.8 Rescission of Payments for Ancillary Service Capacity
- 8.11 Temporary Changes to Ancillary Service Penalties
 - 8.11.1 Application and Termination
 - 8.11.2 Exemption for Penalties Due to CAISO Software Limitations

9. Outages

- 9.1 Coordination and Approval for Outage
- 9.2 Responsibility for Authorized Work on Facilities
- 9.3 Coordination of Outages and Maintenance
 - 9.3.1 CAISO Outage Coordination Functions
 - 9.3.2 Requirement for Approval
 - 9.3.3 Request Submission and Information
 - 9.3.4 Single Point of Contact
 - 9.3.5 Method of Communication
 - 9.3.6 Maintenance Outage Planning
 - 9.3.7 Maintenance Outage Requests by the CAISO
 - 9.3.8 CAISO Notice Required Re Maintenance Outages
 - 9.3.9 Final Approval, Delay and Withholding
 - 9.3.10 Forced Outages
- 9.4 Outage Coordination for New Facilities
 - 9.4.1 Coordination by CAISO
 - 9.4.2 Types of Work Requiring Coordination
 - 9.4.3 Uncomplicated Work
 - 9.4.4 Special Procedures for More Complex Work
- 9.5 Information About Outages
 - 9.5.1 Approved Maintenance Outages
 - 9.5.2 Publication to Website
- 9.6 Facility Power
- 9.7 Multi-Stage Generating Resources Outages

10. Metering

- 10.1 General Provisions
 - 10.1.1 Role of the CAISO
 - 10.1.2 Meter Data Retention by the CAISO
 - 10.1.3 Netting
 - 10.1.4 Meter Service Agreements

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 10.1.5 Access to Meter Data
- 10.1.6 Failure of CAISO Facilities or System
- 10.1.7 Provision of Statistically Derived Meter Data
- 10.2 Metering for CAISO Metered Entities
 - 10.2.1 Responsibilities of CAISO Metered Entities
 - 10.2.2 Duty to Install and Maintain Meters
 - 10.2.3 Metering Standards
 - 10.2.4 Certification of Meters
 - 10.2.5 CAISO Authorized Inspectors
 - 10.2.6 Metering Communications
 - 10.2.7 Format of Meter Data
 - 10.2.8 Security and Meter Data Validation Procedures
 - 10.2.9 Validation, Estimation and Editing of Meter Data
 - 10.2.10 Low Voltage Side Metering
 - 10.2.11 Audit, Testing Inspection and Certification Requirements
 - 10.2.12 Exemptions
 - 10.2.13 Maintenance of Metering Facilities
 - 10.2.14 Installation of Additional Metering Facilities
- 10.3 Metering For Scheduling Coordinator Metered Entities
 - 10.3.1 Applicability
 - 10.3.2 Responsibilities of Scheduling Coordinators and the CAISO
 - 10.3.3 Loss Factors
 - 10.3.4 Load Profile Authorization
 - 10.3.5 Communication of Meter Data
 - 10.3.6 Settlement Quality Meter Data Submission
 - 10.3.7 Meter Standards
 - 10.3.8 Access to Meter Data
 - 10.3.9 Certification of Meters
 - 10.3.10 Requirement for Audit and Testing
 - 10.3.11 Scheduling Coordinator to Ensure Certification
 - 10.3.12 [Not Used]
 - 10.3.13 [Not Used]
 - 10.3.14 Approval by LRA of Security and Validation Procedures
 - 10.3.15 [Not Used]
 - 10.3.16 [Not Used]
 - 10.3.17 Meter Identification
- 10.4 Exemptions
 - 10.4.1 Authority to Grant Exemptions
 - 10.4.2 Guidelines for Granting Exemptions
 - 10.4.3 Procedure for Applying for Exemptions
 - 10.4.4 Permitted Exemptions
- 11. CAISO Settlements and Billing**
 - 11.1 Settlement Principles
 - 11.1.1 [Not Used]
 - 11.1.2 Settlement Charges and Payments
 - 11.1.3 Financial Transaction Conventions and Currency
 - 11.1.4 CAISO Estimates for Initial Settlement Statement T+3B
 - 11.1.5 SQMD for Recalculation Settlement State T+12B
 - 11.2 Settlement of Day-Ahead Market Transactions
 - 11.2.1 IFM Settlements
 - 11.2.2 Calculation of Hourly RUC Compensation
 - 11.2.3 IFM Energy Charges and Payments for Metered Subsystems
 - 11.2.4 CRR Settlements
 - 11.2.5 Payment by OBAALSE for CRRs Through CRR Allocation Process
 - 11.3 Settlement of Virtual Awards

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 11.3.1 Virtual Supply Awards
- 11.3.2 Virtual Demand Awards
- 11.4 Black Start Settlements
 - 11.4.1 Black Start Energy
 - 11.4.2 Black Start Capability
- 11.5 Real-Time Market Settlements
 - 11.5.1 Imbalance Energy Settlements
 - 11.5.2 Uninstructed Imbalance Energy
 - 11.5.3 Unaccounted For Energy (UFE)
 - 11.5.4 Imbalance Energy Pricing; Non-Zero Offset Amount Allocation
 - 11.5.5 Settlement Amount for Residual Imbalance Energy
 - 11.5.6 Settlement Amounts for RTD IIE from Exceptional Dispatch
 - 11.5.7 Congestion Credit and Marginal Credit of Losses Credit
 - 11.5.8 Settlement for Emergency Assistance
 - 11.5.9 Flexible Ramping Product
- 11.6 PDRs, RDRRs, Distributed Energy Resource Aggregations, Non-Generator Resources
 - 11.6.1 Settlement of Energy Transactions Involving PDRs or RDRRs Using Customer Load Baseline Methodology
 - 11.6.2 Settlement of Energy Transactions Using Metering Generator Output Methodology
 - 11.6.3 Settlement of Energy Transactions Involving PDRs or RDRRs Using Customer Load Baseline and Metering Generator Output Methodologies
 - 11.6.4 Settlement of Distributed Energy Resource Aggregations
 - 11.6.5 Settlement of Non-Generator Resources
- 11.7 Additional MSS Settlements Requirements
 - 11.7.1 MSS Load Following Deviation Penalty
 - 11.7.2 Neutrality Adjustments and Charges Assessed on MSS SC
 - 11.7.3 Available MSS Operator Exemption for Certain Program Charges
 - 11.7.4 Emission Cost Responsibility of an SC for an MSS
- 11.8 Bid Cost Recovery
 - 11.8.1 CAISO Determination of Self-Commitment Periods
 - 11.8.2 IFM Bid Cost Recovery Amount
 - 11.8.3 RUC Bid Cost Recovery Amount
 - 11.8.4 RTM Bid Cost Recovery Amount
 - 11.8.5 Unrecovered Bid Cost Uplift Payment
 - 11.8.6 System-Wide IFM, RUC and RTM Bid Cost Uplift Allocation
- 11.9 Inter-SC Trades
 - 11.9.1 Physical Trades
 - 11.9.2 Inter-SC Trades at Aggregated Pricing Nodes
- 11.10 Settlements for Ancillary Services
 - 11.10.1 Settlements for Contracted Ancillary Services
 - 11.10.2 Settlement for User Charges for Ancillary Services
 - 11.10.3 Spinning Reserves
 - 11.10.4 Non-Spinning Reserves
 - 11.10.5 Negative Operating Reserve Obligation Adjustment
 - 11.10.6 Upward Ancillary Services Neutrality Adjustment
 - 11.10.7 Voltage Support
 - 11.10.8 [Not Used]
 - 11.10.9 Settlements of Rescission of Payments for AS Capacity
- 11.11 RACs and Wheeling Transactions
 - 11.11.1 Regional Access Charge
 - 11.11.2 Wheeling Through and Wheeling Out Transactions
- 11.12 Participating Intermittent Resources
 - 11.12.1 Settlement of PIRP Protective Measures
 - 11.12.2 Allocation of PIRP Protective Measures Costs/Revenues
 - 11.12.3 Payment of Participating Intermittent Resource Fees

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 11.12.4 [Not Used]
- 11.13 Settlements and Billing of RMR Charges and Payments
 - 11.13.1 Objectives
 - 11.13.2 Accounts
 - 11.13.3 RMR Payments Calendar
 - 11.13.4 Information Provided by RMR Owners to the CAISO
 - 11.13.5 Validation of RMR Charges and RMR Refunds
 - 11.13.6 Description of the Billing Process
 - 11.13.7 Payment Procedures
 - 11.13.8 Overpayments
 - 11.13.9 Communications
 - 11.13.10 Confidentiality
- 11.14 Neutrality
- 11.15 Payments Under Section 42.1 Contracts
- 11.16 Additional AS and RUC Payment Rescission Requirements
 - 11.16.1 Resources with More Than One Capacity Obligation
 - 11.16.2 Load-Following MSSs with an AS or RUC Capacity Obligation
- 11.17 Application of the Persistent Deviation Metric
 - 11.17.1 Persistent Deviation Threshold and Mitigation
 - 11.17.2 Shut-Down Adjustment
 - 11.17.3 Application of Persistent Deviation Metric to Eligible Intermittent Resource's Residual Imbalance Energy
- 11.18 Emissions Costs
 - 11.18.1 Obligation to Pay Emissions Costs Charges
 - 11.18.2 CAISO Emissions Costs Trust Account
 - 11.18.3 Rate for the Emission Cost Trust Account
 - 11.18.4 Adjustment of the Rate for the Emissions Cost Charge
 - 11.18.5 Credits and Debits of Emissions Cost Charges from SCs
 - 11.18.6 Submission of Emissions Cost Invoices
 - 11.18.7 Payment of Emissions Cost Invoices
- 11.19 FERC Annual Charges
 - 11.19.1 FERC Annual Charge Recovery Rate
 - 11.19.2 FERC Annual Charge Trust Account
 - 11.19.3 Determination of the FERC Annual Charge Recovery Rate
 - 11.19.4 Credits and Debits of FERC Annual Charges from SCs
- 11.20 NERC/WECC Charges
 - 11.20.1 Responsibility for NERC/WECC Charges
 - 11.20.2 [Not Used]
 - 11.20.3 [Not Used]
 - 11.20.4 Process for Invoicing NERC/WECC Charges
 - 11.20.5 Timely Payments
 - 11.20.6 NERC/WECC Charge Trust Account
 - 11.20.7 Preliminary and Final NERC/WECC Charge Invoices
 - 11.20.8 Provision of Payments and Information to the WECC
 - 11.20.9 Reliability Coordinator Charges
- 11.21 Make Whole Payments for Price Corrections
 - 11.21.1 CAISO Demand and Exports
 - 11.21.2 Price Correction for Settlement of Virtual Awards
- 11.22 Grid Management Charge
 - 11.22.1 CAISO's Obligation
 - 11.22.2 Costs Recovered Through the Grid Management Charge
 - 11.22.3 [Not Used]
 - 11.22.4 TOR Charges
 - 11.22.5 Bid Segment Fee
 - 11.22.6 CRR Transaction Fee
 - 11.22.7 Inter-Scheduling Coordinator Trade Transaction Fee

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 11.22.8 Scheduling Coordinator ID Charge
- 11.23 Penalties for Uninstructed Imbalance Energy
- 11.24 [Not Used]
 - 11.24.1 [Not Used]
 - 11.24.2 [Not Used]
 - 11.24.3 [Not Used]
 - 11.24.4 [Not Used]
- 11.25 Settlement of Flexible Ramping Product
 - 11.25.1 Settlement of Forecasted Movement
 - 11.25.2 Settlement of Uncertainty Requirement
 - 11.25.3 Rescission
 - 11.25.4 [Not Used]
 - 11.25.5 [Not Used]
- 11.26 [Not Used]
- 11.27 Voltage Support Charges
- 11.28 Calculating, Charging and Disbursing Default Interest
- 11.29 CAISO as Counterparty; Billing and Payment
 - 11.29.1 Billing and Payment Process Based on Settlement Statement
 - 11.29.2 Time-Frame for Payments or Charges
 - 11.29.3 Prepayments
 - 11.29.4 System Failure
 - 11.29.5 General Principles for Production of Settlement Statements
 - 11.29.6 Balancing of Market Accounts in Absence of Meter Data
 - 11.29.7 Settlements Cycle
 - 11.29.8 Confirmation and Validation
 - 11.29.9 Payment Procedures
 - 11.29.10 Billing and Payment
 - 11.29.11 Instructions for Payment
 - 11.29.12 CAISO's Responsibilities
 - 11.29.13 Non-Payment by a Scheduling Coordinator or CRR Holder
 - 11.29.14 Enforcement Actions for Late Payments
 - 11.29.15 [Not Used]
 - 11.29.16 Prohibition on Transfers
 - 11.29.17 Alternative Payment Procedures
 - 11.29.18 [Not Used]
 - 11.29.19 Payment Errors
 - 11.29.20 Defaults
 - 11.29.21 [Not Used]
 - 11.29.22 Data Gathering and Storage
 - 11.29.23 Communications
 - 11.29.24 CAISO Payments Calendar
- 11.30 Auditing
- 11.31 Intertie Schedules Decline Charges
 - 11.31.1 Decline Monthly Charge – Imports
 - 11.31.2 Decline Monthly Charge – Imports
 - 11.31.3 Allocation of Import/Export Decline Monthly Charges
- 11.32 Measures to Address Intertie Scheduling Practices
- 11.33 Setting Revenue
- 11.34 Invoice Charges for Transferred Frequency Response
 - 11.34.1 Charge Allocation Basis
 - 11.34.2 Calculation and Assessment
 - 11.34.3 Responsibility to Pay Charges
 - 11.34.4 Validation
 - 11.34.5 Disputes and Corrections
 - 11.34.6 Payment Default
 - 11.34.7 Modification to Schedule

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

12. Creditworthiness

- 12.1 Credit and Minimum Participation Requirements
 - 12.1.1 Unsecured Credit Limit
 - 12.1.2 Financial Security and Financial Security Amount
 - 12.1.3 Estimated Aggregate Liability
- 12.2 Review of Creditworthiness
- 12.3 Posting and Releases of Financial Security
 - 12.3.1 Self-Supply of UDC Demand
- 12.4 Calculation of Ongoing Financial Security Requirements
 - 12.4.1 Resolution of a CAISO Request for Additional Security Amount
 - 12.4.2 Dispute Process for a Request for Additional Security Amount
- 12.5 CAISO Enforcement Actions
 - 12.5.1 Under-Secured and Non-Compliance Market Participants
 - 12.5.2 Late Posting of Financial Security
- 12.6 Late Posting of Financial Security
 - 12.6.1 Credit Requirements for CRR Allocations
 - 12.6.2 Credit Requirements for CRR Auctions
 - 12.6.3 Credit Requirements for the Holdings of CRRs
 - 12.6.4 Credit Requirements for Sales of Allocated CRRs
- 12.7 Credit Obligations of New Responsible Utilities for RMR Costs
- 12.8 Credit Requirements Applicable to Virtual Bids
 - 12.8.1 Credit Check in the Day-Ahead Market
 - 12.8.2 Virtual Bid Reference Prices
 - 12.8.3 Adjustment of EAL After Close of the DAM
 - 12.8.4 Adjustment of EAL After the Close of the RTM

13. Dispute Resolution

- 13.1 Applicability
 - 13.1.1 General Applicability
 - 13.1.2 Disputes Involving Government Agencies
 - 13.1.3 Injunctive and Declaratory Relief
 - 13.1.4 Disputes Arising Under Section 11
- 13.2 Negotiation and Mediation
 - 13.2.1 Negotiation
 - 13.2.2 Statement of Claim
 - 13.2.3 Selection of Mediator
 - 13.2.4 Mediation
 - 13.2.5 Demand for Arbitration
- 13.3 Arbitration
 - 13.3.1 Selection of Arbitrator
 - 13.3.2 Disclosures Required of Arbitrators
 - 13.3.3 Arbitration Procedures
 - 13.3.4 Modification of Arbitration Procedures
 - 13.3.5 Remedies
 - 13.3.6 Summary Disposition
 - 13.3.7 Discovery Procedures
 - 13.3.8 Evidentiary Hearing
 - 13.3.9 Confidentiality
 - 13.3.10 Timetable
 - 13.3.11 Decision
 - 13.3.12 Compliance
 - 13.3.13 Enforcement
 - 13.3.14 Costs
- 13.4 Appeal of Award
 - 13.4.1 Basis for Appeal
 - 13.4.2 Appellate Record

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 13.4.3 Procedures for Appeals
- 13.4.4 Award Implementation
- 13.4.5 Judicial Review of FERC Orders
- 13.5 Allocation of Awards Payable by or to the CAISO
 - 13.5.1 Allocation of an Award
 - 13.5.2 Timing of Adjustments
 - 13.5.3 Method of Allocation
- 14. Uncontrollable Force, Indemnity, Liabilities, and Penalties**
 - 14.1 Uncontrollable Forces
 - 14.2 Responsibilities of Affected Entity
 - 14.3 Strikes, Lockouts or Labor Disputes
 - 14.4 Market Participant's Indemnity
 - 14.5 Limitation on Liability
 - 14.5.1 Limitation on 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 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
 - 16.1.4 Conversion of PTO's Rights Under Existing Contracts
 - 16.2 [Not Used]
 - 16.3 Curtailment Under Emergency and Non-Emergency Conditions
 - 16.3.1 Emergency Conditions
 - 16.3.2 Non-Emergency Conditions
 - 16.4 TRTC Instructions
 - 16.4.1 Responsibility to Create TRTC Instructions
 - 16.4.2 Responsible PTO Re Multiple PTO Parties to Existing Contracts
 - 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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 16.11 Inter-Balancing Authority Area ETC Self-Schedule Bid Changes
- 16.12 Intra-Balancing Authority Area ETC Self-Schedules 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 Expectations
 - 17.3 Valid TOR Self-Schedule
 - 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 Operations Obligations
- 18. [Not Used]**
- 19. [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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 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
 - 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 Content 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 [Not Used]
 - 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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 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 Solution
- 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 Limitation on Regional Activities
 - 24.8.3 Information Requested from Load Serving Entities
 - 24.8.4 Information from BAAs and Regulators
 - 24.8.5 Obligation to Provide Updated Information
- 24.9 Participating TO Study Obligation
- 24.10 Operational Review and Impact Analysis
 - 24.10.1 [Not Used]
 - 24.10.2 [Not Used]
 - 24.10.3 [Not Used]
 - 24.10.4 [Not Used]
- 24.11 [Not Used]
 - 24.11.1 [Not Used]
 - 24.11.2 [Not Used]
 - 24.11.3 [Not Used]
- 24.12 WECC and Interregional Coordination
- 24.13 Interregional Transmission Proposals in the Regional Process
 - 24.13.1 [Not Used]
 - 24.13.2 [Not Used]
- 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
- 24.17 Evaluation of Interregional Transmission Projects
 - 24.17.1 Submission of Interregional Transmission Projects
 - 24.17.2 Interregional Transmission Project Assessment
 - 24.17.3 Selection in the Comprehensive Transmission Plan
 - 24.17.4 Interregional Transmission Project Cost Recovery
 - 24.17.5 Monitoring the Status of Interregional Transmission Projects
 - 24.17.6 Delay in Interregional Transmission Project In-Service Date
- 24.18 Order 1000 Common Interregional Tariff
 - 24.18.1 Annual Interregional Information Exchange
 - 24.18.2 Annual Interregional Coordination Meeting
 - 24.18.3 Interregional Transmission Project Joint Evaluation Process
 - 24.18.4 Interregional Cost Allocation Process
 - 24.18.5 Application of Regional Cost Allocation Methodology
- 25. Interconnection of Generating Units and Facilities**
 - 25.1 Applicability
 - 25.1.1 Interconnection Request and Generating Unit Requirements
 - 25.1.2 Affidavit Requirements
 - 25.2 Interconnection to the Distribution System
 - 25.3 Maintenance of Encumbrances
 - 25.4 Asynchronous Generating Facilities
 - 25.4.1 Asynchronous Generating Facilities-Reactive Power
 - 25.5 Modifications to Generating Facilities

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 25.5.1 *No Header*
- 25.5.2 *No Header*
- 25.5.3 *No Header*

26. Transmission Rates and Charges

- 26.1 Access Charge
 - 26.1.1 Publicly Owned Electric Utilities Access Charge
 - 26.1.2 Regional Access Charge Settlement
 - 26.1.3 Distribution 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 Market 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 IFM
 - 27.5.5 Load Distribution Factor
 - 27.5.6 Management & Enforcement of Constraints in the CAISO Markets
- 27.6 State Estimator
- 27.7 Constrained Output Generation
 - 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 Information Requirements
 - 27.8.3 Changes in Status and Configurations of Resource
- 27.9 Non-Generator Resources MWh Constraints
- 27.10 Election to Use Non-Generator Resource Generic Modeling Functionality
- 27.11 Natural Gas Constraint

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 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. Energy Imbalance Market**
 - 29.1 General Provisions.
 - 29.2 EIM Entity Access to the Real-Time Market
 - 29.3 [Not Used]
 - 29.4 Roles and Responsibilities
 - 29.5 [Not Used]
 - 29.6 Communications
 - 29.7 EIM Operations Under Normal and Emergency Conditions.
 - 29.8 [Not Used]
 - 29.9 Outages and Critical Contingencies.
 - 29.10 Metering and Settlement Data.
 - 29.11 Settlements and Billing for EIM Market Participants.
 - 29.12 Creditworthiness
 - 29.13 Dispute Resolution
 - 29.14 Uncontrollable Forces, Indemnity, Liabilities, and Penalties
 - 29.15 [Not Used]
 - 29.16 [Not Used]
 - 29.17 EIM Transmission System
 - 29.18 [Not Used]
 - 29.19 [Not Used]
 - 29.20 Confidentiality
 - 29.21 [Not Used]
 - 29.22 Miscellaneous Provisions in Addition to Section 22.
 - 29.23 [Not Used]
 - 29.24 [Not Used]
 - 29.25 [Not Used]
 - 29.26 Transmission Rates and Charges.
 - 29.27 CAISO Markets and Processes.
 - 29.28 Inter-SC Trades
 - 29.29 [Not Used]
 - 29.30 Bid and Self-Schedule Submission for CAISO Markets.
 - 29.31 Day-Ahead.
 - 29.32 Greenhouse Gas Regulation and EIM Bid Adders.
 - 29.33 [Not Used]
 - 29.34 EIM Operations
 - 29.35 Market Validation and Price Correction
 - 29.36 [Not Used]
 - 29.37 Rules of Conduct
 - 29.38 Market Monitoring

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 29.39 EIM Market Power Mitigation.
 - 29.40 [Not Used]
 - 29.41 [Not Used]
 - 29.42 [Not Used]
 - 29.43 [Not Used]
 - 29.44 Flexible Ramping Product
- 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 Proxy Cost and Registered Cost Methodologies
 - 30.4.1 Start-Up and Minimum Load 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
 - 30.5.6 Non-Generator Resource Bids
 - 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 Intertie Schedules
 - 30.6.3 Net Benefits Test for Scheduling of PDRs or PDRRs
 - 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 MW Constraints
 - 30.11 Filings to Recover Commitment-Related Fuel Costs
 - 30.12 Eligibility to Submit Filings to Recover Marginal Fuel-Related Costs
 - 30.12.1 Applicability
 - 30.12.2 Notice and Process
 - 30.12.3 Documentation Required for FERC Filing
 - 30.12.4 Payment and Allocation Costs Recovered Per FERC Order
- 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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 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 Interties
 - 31.8.1 Scheduling Constraints
 - 31.8.2 Physical Flow Constraints
- 32. [Not Used]**
- 33. [Not Used]**
 - 33.1 [Not Used]
 - 33.2 [Not Used]
 - 33.3 [Not Used]
 - 33.4 [Not Used]
 - 33.5 [Not Used]
 - 33.6 [Not Used]
 - 33.7 [Not Used]
 - 33.8 [Not Used]
 - 33.8.1 [Not Used]
 - 33.9 [Not Used]
- 34. Real-Time Market**
 - 34.1 Inputs to the Real-Time Market
 - 34.1.1 Day-Ahead Market Results as Inputs to the Real-Time Market
 - 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
 - 34.2 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
 - 34.3.3 [Not Used]
 - 34.4 Fifteen Minute Market
 - 34.4.1 Real-Time Ancillary Services Procurement
 - 34.5 Real-Time Dispatch

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 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, PDRs, and RDRRs
- 34.9 Utilization of the Energy Bids
 - 34.9.1 [Not Used]
 - 34.9.2 [Not Used]
 - 34.9.3 [Not Used]
 - 34.9.4 [Not Used]
- 34.10 Dispatch of Energy from Ancillary Services
 - 34.10.1 [Not Used]
 - 34.10.2 [Not Used]
- 34.11 Exceptional Dispatch
 - 34.11.1 System Reliability Exceptional Dispatches
 - 34.11.2 Other Exceptional Dispatches
 - 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
 - 34.14.1 [Not Used]
- 34.15 Treatment of Resource Adequacy Capacity in the RTM
 - 34.15.1 [Not Used]
 - 34.15.2 [Not Used]
 - 34.15.3 [Not Used]
 - 34.15.4 [Not Used]
 - 34.15.5 [Not Used]
 - 34.15.6 [Not Used]
- 34.16 Real-Time Activities in the Hour Prior to Settlement Period
 - 34.16.1 Confirm Interchange Transaction Schedules (ITs)
 - 34.16.2 [Not Used]
 - 34.16.3 [Not Used]
- 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
- 34.19 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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 34.20.1 General Principles
- 34.20.2 Determining Real-Time LMPs
- 34.21 Temporary Waiver of Timing Requirements for the RTM
 - 34.21.1 Criteria for Temporary Waiver
 - 34.12.2 Information to be Published on Secure Communication System

35. Market Validation and Price Correction

- 35.1 Market Validation
- 35.2 Timing of 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
 - 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 Adjustments to the FNM in Preparing the CRR FNM
 - 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
 - 36.8.4 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 Charge
 - 36.9.3 CRR Eligible Quantities
 - 36.9.4 Eligible CRR Sources and Sinks
 - 36.9.5 Priority Nomination Process

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 36.10 CRR Allocation to Merchant Transmission 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
 - 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 IBAAAs or Modifying Existing IBAAAs
 - 36.14.1 Coordination of IBAA Changes with Release of CRRs
 - 36.14.2 Modification to CRR Settlement to Reflect IBAA Changes
 - 36.14.3 IBAA Change Impact on Adequacy of Previously-Released CRRs
- 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 and 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 Available Reporting Requirements
 - 37.4.1 Reporting Availability
 - 37.4.2 Scheduling and Final Approval of Outages
 - 37.4.3 [Not Used]
 - 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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 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 or Actual SQMD Penalty without Recalculation Settlement Statement
- 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 as Appropriate
 - 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 [Not Used]
 - 40.2 Information Requirements for Resource Adequacy Programs

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 40.2.1 Load Serving Entities
- 40.2.2 Non-CPUC Load Serving Entities
- 40.2.3 [Not Used]
- 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
 - 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 [Not Used]
 - 40.5.1 [Not Used]
 - 40.5.2 [Not Used]
 - 40.5.3 [Not Used]
 - 40.5.4 [Not Used]
 - 40.5.5 [Not Used]
- 40.6 Requirements for SCs and Resources for LSEs
 - 40.6.1 Day-Ahead Availability
 - 40.6.2 Real-Time Availability
 - 40.6.3 Additional Availability Requirements or Resources that are Not Long Start Units or Extremely Long Start Resources
 - 40.6.4 Use-Limited Resources Additional Availability Requirements
 - 40.6.5 Additional Availability Requirements for System Resources
 - 40.6.6 Requirement for Partial Resource Adequacy Resources
 - 40.6.7 Release of Long Start Units
 - 40.6.8 Use of Generated Bids
 - 40.6.9 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 Load, 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 Resource Adequacy Availability Incentive Mechanism
 - 40.9.1 Introduction to RAAIM
 - 40.9.2 Exemptions
 - 40.9.3 Availability Assessment
 - 40.9.4 Additional Rules on Calculating Monthly and Daily Average Availability
 - 40.9.5 Availability Standard
 - 40.9.6 Non-Availability Charges and Availability Incentive Payments
 - 40.9.7 Reporting
- 40.10 Flexible RA Capacity
 - 40.10.1 Flexible Capacity Needs Assessment
 - 40.10.2 Allocation of Flexible Capacity Needs
 - 40.10.3 Flexible Capacity Categories
 - 40.10.4 Effective Flexible Capacity
 - 40.10.5 Flexible RA Capacity Plans

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

40.10.6 Flexible RA Capacity Must-Offer Obligation

- 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 Units 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 Applicable Reliability Criteria**
 - 42.1 Generation Planning Reserve Criteria
 - 42.1.1 *No Header*
 - 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 Maximize 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
 - 42.2 Transferred Frequency Response
 - 42.2.1 Procurement of Transferred Frequency Response
 - 42.2.2 Allocation of Transferred Frequency Response Costs Incurred

- 43. Capacity Procurement Mechanism**
 - 43.1 Applicability
 - 43.2 Capacity Procurement Mechanism Designation
 - 43.2.1 SC Failure to Show Sufficient Local Capacity Area Resource
 - 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
 - 43.2.7 Cumulative Deficiency in Flexible RA Capacity
 - 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

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- 43.3.8 Term – Flexible Capacity CPM Designation
- 43.4 Selection of Eligible Capacity Under the CPM
 - 43.4.1 Limitation of Eligibility for Flexible Capacity CPM Designation
 - 43.4.2 Designation Amount
 - 43.4.3 Simultaneous Designations
- 43.5 Obligations of a Resource Designated Under the CPM
 - 43.5.1 Availability Obligations
 - 43.5.2 Obligation to Provide Capacity and Termination
 - 43.5.3 Availability Obligations for Simultaneous Designations
- 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 on 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 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 CPM
 - 43.8.7 Allocation of CPM Costs for Resources at Risk of Retirement
 - 43.8.8 Allocation of CPM Flexible Capacity Costs
- 43.9 Crediting of CPM Capacity
- 43.10 [Not Used]

43A. Capacity Procurement Mechanism

- 43A.1 Applicability
- 43A.2 Capacity Procurement Mechanism Designation
 - 43A.2.1 SC Failure to Show Sufficient Local Capacity Area Resources
 - 43A.2.2 Collective Deficiency in Local Capacity Area Resources
 - 43A.2.3 SC Failure to Show Sufficient Resource Adequacy Resources
 - 43A.2.4 CPM Significant Events
 - 43A.2.5 Exceptional Dispatch CPM
 - 43A.2.6 Capacity at Risk of Retirement Needed for Reliability
 - 43A.2.7 Cumulative Deficiency in Flexible RA Capacity
- 43A.3 Terms of CPM Designation
 - 43A.3.1 SC Annual Plan Failure to Show Local Capacity Area Resources
 - 43A.3.2 SC Month Plan Failure to Show Local Capacity Area Resources
 - 43A.3.3 Annual Plan Collective LCA Resources Insufficient
 - 43A.3.4 SC Failure to Show Sufficient Resource Adequacy Resources
 - 43A.3.5 Term – CPM Significant Event
 - 43A.3.6 Term – Exceptional Dispatch CPM
 - 43A.3.7 Term – Capacity at Risk of Retirement Needed for Reliability
 - 43A.3.8 Term – Flexible Capacity CPM Designation
- 43A.4 Selection of Eligible Capacity Under the CPM through Competitive Solicitation Processes (CSP) and General Eligibility Rules
 - 43A.4.1 Offer Rules to the CSPs
 - 43A.4.2 Administering the CSPs
 - 43A.4.3 Designation Amount.
- 43A.5 Obligations of a Resource Designated Under the CPM
 - 43A.5.1 Availability Obligations.

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

43A.5.2	Obligation to Provide Capacity and Termination
43A.5.3	Availability Obligations for Simultaneous Designations.
43A.5.4	Individualized Non-Availability Charges and Availability Incentive Payments
43A.6	Reports
43A.6.1	CPM Designation Market Notice
43A.6.2	Designation of a Resource Under the CPM
43A.6.3	Non-Market and Repeated Market Commitment of Non-RA Capacity
43A.6.4	Publication of Offers Submitted to the Competitive Solicitation Process
43A.7	Payments to Capacity Designated Under the CPM
43A.7.1.	Calculation of Monthly CPM Capacity Payment
43A.7.2	Payments for Overlapping CPM Designations to the Same Resource
43A.7.3	Market Payments
43A.8	Allocation of CPM Capacity Payment Costs
43A.8.1	LSE Shortage of Local Capacity Area Resources in Annual Plan
43A.8.2	LSE Shortage of Local Capacity Area Resources in Month Plan
43A.8.3	Collective Deficiency in Local Capacity Area Resources
43A.8.4	LSE Shortage of Demand or Reserve Margin Requirement in Plan
43A.8.5	Allocation of CPM Significant Event Costs
43A.8.6	Allocation of Exceptional Dispatch CPMs
43A.8.7	Allocation of CPM Costs for Resources at Risk of Retirement
43A.8.8	Allocation of Flexible Capacity CPM Costs
43A.9	Crediting of CPM Capacity
43A.10	[Not Used]

44. Flexible Ramping Product

44.1	In General.
44.2	Uncertainty Awards
44.2.1	Optimization.
44.2.2	Variable Energy Resources.
44.2.3	Eligibility for Uncertainty Award.
44.2.4	Determination of Uncertainty Requirement.
44.3	Forecasted Movement
44.3.1	Generally.
44.3.2	RTD Forecasted Movement.
44.3.3	FMM Forecasted Movement.

Appendix A Master Definition Supplement

Appendix B Pro Forma Agreements

Appendix B.1	Scheduling Coordinator Agreement
Appendix B.2	Participating Generator Agreement
Appendix B.3	Net Schedule Participating Generator Agreement
Appendix B.4	Participating Load Agreement
Appendix B.5	Dynamic Scheduling Agreement for Scheduling Coordinators
Appendix B.6	MSA for Metered Entities (MSA CAISOME)
Appendix B.7	Meter Service Agreement for Scheduling Coordinators
Appendix B.8	Utility Distribution Company Operating Agreement (UDCOA)
Appendix B.9	Dynamic Scheduling Host Balancing Authority Operating Agreement (DSHBAOA)
Appendix B.10	Small Utility Distribution Company Operating Agreement (SUDCOA)
Appendix B.11	Congestion Revenue Rights (CRR) Entity Agreement
Appendix B.12	Metered Subsystem (MSS) Entity Agent Agreement
Appendix B.13	Resource-Specific System Resource Agreement
Appendix B.14	Demand Response Provider Agreement (DRPA)
Appendix B.15	Convergence Bidding Entity Agreement (CEBA)

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

Appendix B.16	Pseudo-Tie Participating Generator Agreement (PPGA)
Appendix B.17	Energy Imbalance Market Entity Agreement (EIMIA)
Appendix B.18	Energy Imbalance Market Scheduling Coordinator Agreement (EIMSCA)
Appendix B.19	Energy Imbalance Market Participating Resource Agreement (EIMPRA)
Appendix B. 20	Energy Imbalance Market Participating Resource Scheduling Coordinator Agreement (EIMPRSCA)
Appendix B.21	Distributed Energy Resource Provider Agreement (DERPA)
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	Congestion Revenue Rights Transition Period
Appendix I	Station Power Protocol
Appendix J	Grandfathered Metering and Settlement Provisions for Trading Days Prior to October 1, 2011, and Grandfathered Standard Capacity Product Provisions
Appendix K	Ancillary Service Requirements Protocol (ASRP)
Appendix L	Method to Assess Available Transfer Capability
Appendix M	Dynamic Scheduling Protocol (DSP)
Appendix N	Pseudo-Tie Protocol
Appendix O	CAISO Market Surveillance Committee
Appendix P	CAISO Department of Market Monitoring
Appendix Q	Eligible Intermittent Resource Protocol (EIRP)
Appendix R	Uninstructed Deviation Penalty (UDP) Aggregation Protocol
Appendix S	Small Generator Interconnection Procedures (SGIP)
Appendix T	Small Generator Interconnection Agreement (SGIA) <i>pro forma</i>
Appendix U	Large Generator Interconnection Procedures (LGIP)
Appendix V	Large Generator Interconnection Agreement (LGIA) <i>pro forma</i>
Appendix W	Amendment No. 39 Interconnection Procedures
Appendix X	Approved Project Sponsor Agreement (APSA) <i>pro forma</i>
Appendix Y	Generator Interconnection Procedures (GIP) for Interconnection Requests

California Independent System Operator Corporation
Fifth Replacement Electronic Tariff

- Appendix Z** Large Generator Interconnection Agreement for Interconnection Requests Process Under the Generator Interconnection Procedures
- Appendix AA** Grandfathered Resource Adequacy Provisions for February 2018 to March 2018
- Appendix BB** Standard Large Generator Interconnection Agreement (LGIA) for Interconnection Requests in a Serial Study Group *pro forma*
- Appendix CC** Large Generator Interconnection Agreement (LGIA) for Interconnection Requests in a Queue Cluster Window *pro forma*
- Appendix DD** Generator Interconnection and Deliverability Allocation Procedures (GIDAP)
- Appendix EE** Large Generator Interconnection Agreement (LGIA) for Interconnection Requests Processed Under the Generator Interconnection and Deliverability Allocation Procedures (GIDAP) *pro forma*
- Appendix FF** Small Generator Interconnection Agreement (SGIA) for Interconnection Requests Processed Under the Generator Interconnection and Deliverability Allocation Procedures (GIDAP) *pro forma*
- Appendix GG** One-Time Interconnecting Generator Downsizing Opportunity
- Appendix HH** Generator Interconnection Agreement Amendment Regarding Downsizing
- Appendix II** Market-Based Rate Authority Suspension