

California Independent System Operator Corporation  
Fifth Replacement Electronic Tariff

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**19. Reliability Coordinator**

**19.1 General Provisions**

- (a) **RC Services.** The CAISO will provide RC Services to RC Customers that execute the Reliability Coordinator Services Agreement (RCSA) and the CAISO Balancing Authority.
- (b) **Tariff Obligations.** RC Customers must comply with –
  - (1) the provisions of Section 19; and
  - (2) other provisions of the CAISO Tariff that apply to the extent such provisions –
    - (A) expressly refer to Section 19 or RC Customers;
    - (B) are cross referenced in Section 19; or
    - (C) are included in Section 1 or Appendix A.
- (c) **Inconsistency Between Provisions.** If there is an inconsistency between a provision in this Section 19 and another provision of the CAISO Tariff regarding the rights or obligations of RC Customers, the provision in Section 19 shall prevail to the extent of the inconsistency.
- (d) **Inconsistency With Requirements of NERC Reliability Standards.** If there is an inconsistency between a provision in this Section 19 or any other CAISO Tariff provision applied to RC Customers through Section 19 and an obligation or requirement set forth in an applicable NERC Reliability Standard, the NERC Reliability Standard shall prevail to the extent of the inconsistency.

**19.2 Access to RC Services**

- (a) **In General.** The CAISO will –
  - (1) obtain certification from NERC and WECC to perform the functions of a Reliability Coordinator;
  - (2) maintain such certification as a Reliability Coordinator; and
  - (3) provide RC Services in accordance with the NERC Reliability Standards to –
    - (A) transmission operators in the CAISO Balancing Authority Area;
    - (B) the CAISO Balancing Authority;
    - (C) other Balancing Authorities that request such services from the CAISO

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and execute the RCSA, including Balancing Authorities that are also registered as transmission operators; and

- (D) transmission operators that are within Balancing Authority Areas receiving RC Services from the CAISO.

(b) **Implementation of RC Services.**

- (1) **Balancing Authorities.** A Balancing Authority that elects to receive Reliability Coordinator services from the CAISO must first execute an RCSA with the CAISO that establishes –

- (A) the Balancing Authority as an RC Customer of the CAISO;
- (B) the transmission operators within the Balancing Authority Area that will take RC Services from the CAISO, including itself if the Balancing Authority is also registered as a transmission operator;
- (C) the date upon which the Balancing Authority and the identified transmission operators will receive RC Services from the CAISO (the “RC Services Date”); and
- (D) the obligation of the Balancing Authority to complete the onboarding requirements in Section 19.2(b)(7)-(9) prior to the RC Services Date.

- (2) **Transmission Operators in Balancing Authority Areas External to CAISO.** Transmission operators in an RC Customer Balancing Authority Area must execute a RCSA that establishes –

- (A) whether the transmission operator will be invoiced by their associated Balancing Authority or invoiced directly by the CAISO; and
- (B) the date upon which the transmission operator will begin receiving RC Services from the CAISO (the “RC Services Date”); and
- (C) the obligation of the transmission operator to complete the onboarding requirements set forth in Section 19.2(b)(7)-(9) prior to the RC Services Date.

- (3) **Transmission Operators in the CAISO Balancing Authority Area.** Transmission operators in the CAISO Balancing Authority Area must execute a RCSA that establishes the obligation of the transmission operator to complete the onboarding requirements in Section 19.2(b)(7)-(9) prior to the RC Services Date for the CAISO Balancing Authority Area.
- (4) **RC Services Date.** The CAISO, in consultation with the RC Customer, will in its discretion determine the RC Services Date for each entity requesting RC Services, which will be targeted for April 1 of each calendar year except for the initial onboarding dates established in Section 19.2(b)(6).
- (5) **Onboarding Period.** The CAISO, in consultation with the RC Customer, will in its discretion establish the onboarding period based on the complexity and compatibility of the Balancing Authority's transmission and technology systems with the CAISO systems, certification requirements, number and size of transmission operators within the Balancing Authority Area, and the planned timing of the CAISO's implementation of RC Services.
- (6) **Initial Onboarding Dates.** The initial RC Services Dates will be –
- (A) no earlier than July 1, 2019 for RC Customers within the CAISO's Balancing Authority Area and other RC Customers with that RC Services Date; and
  - (B) no earlier than September 1, 2019 for RC Customers outside of the CAISO's Balancing Authority Area with an RC Services Date other than what may be provided under Section 19.2(b)(6)(A).
- (7) **Integration Testing and Shadow Operations.** The CAISO and the RC Customer will, prior to the RC Services Date, engage in functional and system integration testing, shadow operations, and other activities that confirm the RC Customer's onboarding requirements are complete and sufficient to meet the readiness criteria as set forth in the Business Practice Manual for RC Services.

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- (8) **Readiness Determination.** No later than 30 days prior to the RC Services Date, the CAISO will determine, in consultation with the RC Customer, whether the systems and processes of the RC Customer and the CAISO will be ready for the CAISO to begin to provide the RC Customer with RC Services, according to the readiness criteria set forth in the Business Practice Manual for RC Services.
- (9) **Readiness Statement.** The CAISO and the RC Customer will exchange a readiness statement with each other at least 30 days prior to the RC Services Date in which a senior officer of each entity states –
- (A) that the processes and systems of the prospective RC Customer and the CAISO have satisfied or will have satisfied the readiness criteria set forth in the Business Practice Manual for RC Services;
  - (B) any exceptions from the readiness criteria specified in the Business Practice Manual for RC Services, and that despite such exceptions, the criteria were met or will be met;
  - (C) that the RC Services Date is conditional on the resolution of the known issues identified in the statements and any unforeseen issues that undermine the satisfaction of the readiness criteria set forth in the Business Practice Manual for RC Services; and
  - (D) if, subsequent to exchanging readiness statements, the CAISO or the RC Customer determines that it cannot proceed with implementation on the RC Services Date, the CAISO or the RC Customer will notify the other of the delay, the reason for the delay, the proposed new RC Services Date, if it can be determined, and whether it will need to re-issue a portion or all of the readiness statement.
- (10) **Readiness Reporting.** The CAISO will report on the CAISO Website periodically, but not less than monthly during integration testing and shadow operations, on progress towards achieving the readiness criteria set forth in the Business Practice Manual for RC Services.

**19.3 Supplemental Services – Hosted Advanced Network Applications (HANA)**

- (a) **Scope of HANA Services.** The CAISO will also offer web-based HANA services to its RC Customers as those services are described in the Business Practice Manual for RC Services.
- (b) **Initial Commitment and Term.** An RC Customer that elects to obtain HANA services from the CAISO will be required to make a three-year initial commitment for these services, after which the RC Customer may take HANA services for additional one-year terms as provided in the Business Practice Manual for RC Services.
- (c) **Notification of Election.** An RC Customer must notify the CAISO in writing 90 calendar days in advance of the date that the RC Customer elects to take HANA.
- (d) **Termination of HANA Services.** An RC Customer may terminate HANA services in accordance with the RCSA.

**19.4 Supplemental Services – Physical Security Review**

- (a) **Physical Security Review.** If requested by the RC Customer, the CAISO will provide RC Customers that are transmission operators with verification of their periodic risk assessments of their transmission stations and substations in accordance with Critical Infrastructure Protection Standard 014 (CIP-014) if requested pursuant to the RCSA.
- (b) **Scope of Other Supplemental Services.** Further detail regarding the nature of the physical security review, as well as any other supplemental services offered by the CAISO, is described in the Business Practice Manual for RC Services.

**19.5 Roles and Responsibilities**

- (a) **CAISO Reliability Coordinator Obligations.**
  - (1) **Reliability Coordinator Services.** The CAISO, as the Reliability Coordinator for the RC Customer, will perform the specific tasks and functions applicable to a Reliability Coordinator pursuant to the NERC Reliability Standards as detailed in the RC Operating Procedures, which include –
    - (A) providing outage coordination services;
    - (B) performing operations planning analysis;

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- (C) conducting real-time assessment, monitoring and wide area situational awareness;
  - (D) administering a system operating limit (SOL) methodology;
  - (E) approving system restoration plans and facilitating system restoration drills; and
  - (F) issuing operating instructions to RC Customers with respect to monitored facilities.
- (2) **Other CAISO Reliability Responsibilities.** Nothing in Section 19 shall alter the CAISO's responsibilities under the other sections of the CAISO Tariff, under any agreement not required by Section 19, or under the NERC Reliability Standards or any other Applicable Reliability Criteria as the Balancing Authority for the CAISO Balancing Authority Area and the transmission operator for the CAISO Controlled Grid, provided that the CAISO, as the Balancing Authority for the CAISO Balancing Authority Area and the transmission operator for the CAISO Controlled Grid, must comply with applicable obligations in Section 19, including Section 19.5(b)(2)(B).
- (3) **Relationship Among CAISO Registered Functions.** The CAISO in its function as the Reliability Coordinator shall at all times provide RC Services in a manner that does not unduly discriminate or give undue preference to any RC Customer, including itself as a Balancing Authority and transmission operator.
- (b) **RC Customer Obligations.**
- (1) **RC Customer Eligibility.** An RC Customer must be registered and certified under the applicable authorities as –
    - (A) a Balancing Authority;
    - (B) a transmission operator within a Balancing Authority Area that receives RC Services from the CAISO; or
    - (C) a transmission operator within the CAISO Balancing Authority Area.

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- (2) **RC Customer Obligations.** An RC Customer will perform the obligations of an RC Customer in accordance with the RCSA and Section 19 and the obligations required by NERC Reliability Standards applicable to the functions for which it is registered, insofar as they relate to interactions with the Reliability Coordinator, which include –
- (A) exchanging data, operating plans, operating procedures, studies, and reports with the CAISO in accordance with the Business Practice Manual for RC Services and applicable RC Operating Procedures;
  - (B) following CAISO operating instructions as the Reliability Coordinator with respect to monitored transmission facilities in accordance with applicable RC Operating Procedures; and
  - (C) promptly providing such information as the CAISO may reasonably request in relation to major incidents consistent with the NERC event analysis program.
- (3) **Other Balancing Authority or Transmission Operator Responsibilities.** Nothing in the CAISO Tariff will alter an RC Customer's responsibilities under NERC Reliability Standards as the Balancing Authority for its Balancing Authority Area, as a transmission operator, or any other function for which the RC Customer is registered.
- (4) **RC Customer Termination of Services.**
- (A) **Reliability Coordinator Services Agreement.** An RC Customer located outside of the CAISO Balancing Authority Area that elects to terminate RC Services must terminate the RCSA pursuant to its terms.
  - (B) **Notice.** Delivery to the CAISO of a written notice of termination pursuant to the terms of the RCSA shall represent the commitment by the RC Customer to undertake all necessary preparations to receive services from a Reliability Coordinator other than the CAISO.

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- (C) **Actions Following Notice.** Upon receipt of such notice, the CAISO will undertake all reasonably necessary preparations to assist in transitioning the RC Customer to a Reliability Coordinator other than the CAISO.

**19.6 [Reserved for tariff language pending July 1, 2019, effective date]**

**19.7 [Reserved for tariff language pending July 1, 2019, effective date]**

**19.8 Supplemental Services – HANA Services Charge**

- (a) **HANA Services Charge.** The CAISO will charge RC Customers that elect HANA services the annual cost for the ongoing software license fee, which will be passed through directly to the RC Customers, and the costs set forth in Appendix F, Schedule 7 which will include –
- (1) a start-up cost amortized over an initial 3-year minimum commitment period; and
  - (2) the annual cost for CAISO support of the HANA services.
- (b) **Invoicing for HANA Services.** The CAISO will invoice the RC Customer for HANA services 21 Business Days prior to when the services commence. Each year thereafter, the CAISO will invoice the RC Customer for HANA services 21 Business Days prior to the anniversary date of when the RC Customer first began to receive HANA services, unless otherwise provided in Schedule 2 of the RCSA.
- (c) **Payment for HANA Services.** Payment for HANA services will be due within 21 Business Days of the invoice date, unless otherwise provided in Schedule 2 of the RCSA.
- (d) **Termination of HANA Services.** An RC Customer that has elected to receive HANA services will continue to be invoiced for the services annually during the initial 3-year commitment period and each year thereafter until the services have been terminated in accordance with the Business Practice Manual for RC Services.

**19.9 Supplemental Services – Physical Security Review Charge**

- (a) **In General.** An RC Customer may request in writing that the CAISO perform physical security review or other supplemental reliability services as specified in the Business Practice Manual for RC Services.

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- (b) **Charges.** An RC Customer electing such services will be charged the actual costs incurred by the CAISO provided that (i) the RC Customer requests in writing that the CAISO perform the services, and (ii) the RC Customer provides a \$50,000 deposit to the CAISO at the time the request is submitted along with any information required by the CAISO to perform the services, and –
- (1) if the deposit exceeds the actual cost incurred to provide physical security review services, the CAISO will refund the excess amount to the RC Customer;
  - (2) if the actual cost of performing the services exceeds the deposit, the CAISO will invoice the RC Customer for the excess, and the RC Customer shall pay the undisputed amount within thirty (30) calendar days;
  - (3) if the RC Customer fails to timely pay any undisputed costs, the CAISO shall not be obligated to continue to perform physical security review services unless and until the RC Customer has paid all undisputed amounts.

**19.10 Dispute Resolution Procedures**

- (a) **In General.** The dispute resolution provisions in Section 13 shall apply to any dispute arising under Section 19 or the RCSA, except that any reference in Section 13 to Market Participants will be read as a reference to the RC Customer, and except as provided in Section 19.10(c).
- (b) **Timing.** An RC Customer that has disputed an RC Services Invoice under Section 19.7 must initiate any good faith negotiation or other dispute resolution remedy under Section 13 within 90 days after the day on which the CAISO provides notice of resolution of the dispute; otherwise, the RC Services Invoice will be binding on the RC Customer.
- (c) **Limitation on Disputes.** Claims or disputes asserting that the CAISO or any RC Customer was not, or is not, in compliance with the NERC Reliability Standards, and claims the CAISO failed to perform a specific task or function required of a Reliability Coordinator, will not be subject to resolution under Section 13 of the CAISO Tariff; provided that nothing in this section shall limit the function of the Reliability Coordinator Oversight Committee under its charter established pursuant to Section 19.11.

**19.11 Reliability Coordinator Oversight**

- (a) **In General.** The CAISO will establish a Reliability Coordinator Oversight Committee that provides RC Customer input and oversight to the CAISO's provision of RC Services.
- (b) **Charter.** The CAISO will, in consultation with prospective RC Customers, adopt a public charter that prescribes the membership, responsibilities and procedures of the Reliability Coordinator Oversight Committee.

**19.12 Uncontrollable Forces**

The provisions of Sections 14.1 – 14.3 regarding Uncontrollable Forces will apply to RC Customers, except that all references to "Market Participants" in such provisions shall be read as including RC Customers for purposes of application.

**19.13 Liability**

The provisions of Article VIII of the RCSA will apply to the CAISO and RC Customers with respect to any liability arising under Section 19.

**19.14 Penalties**

The provisions of Section 14.7 regarding the allocation of Reliability Standards penalties will apply to RC Customers.

**19.15 Confidentiality**

The confidentiality provisions of Section 20 will apply to provision of RC Services to RC Customers, including any information provided by RC Customers to the CAISO in connection with the provision of RC Services, except that all references to "Market Participants" in Section 20 shall be read as including RC Customers for purposes of application.

**19.16 Miscellaneous Provisions in Addition to Section 22**

Section 22 will apply to the CAISO's provision of RC Services pursuant to Section 19, except that all references to "Market Participants" in Section 22 shall be read as including RC Customers for purposes of application.