

November 13, 2020

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

> Re: **California Independent System Operator Corporation**

Third Compliance Filing Docket No. ER19-1950-002

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO") submits this filing to comply with the Commission order issued in this proceeding on July 16, 2020 ("Second Compliance Order"), in response to the CAISO's second filing to comply with Order No. 845.2 The Commission's Second Compliance Order accepted the CAISO's initial compliance filing effective February 20, 2020, and directed the CAISO to submit a further compliance filing.

The CAISO addresses the Commission's directives for further compliance below, and requests the Commission find this compliance filing satisfies these directives consistent with Order No. 845.

#### I. **Contingent Facilities**

#### **Background** Α.

The Second Compliance Order found the CAISO tariff generally complies with Order No. 845's requirement to identify Contingent Facilities.<sup>3</sup> The Commission found, however, the CAISO's terms and provisions for contingent

California Independent System Operator Corp., 172 FERC 61,049 (2020) ("Second Compliance Order"). Capitalized terms not otherwise defined herein have the meanings set forth in the CAISO tariff, and references to specific sections, articles, and appendices are references to sections, articles, and appendices in the current CAISO tariff as revised or proposed in this filing, unless otherwise indicated.

Reform of Generator Interconnection Procedures and Agreements, Order No. 845, 163 FERC ¶ 61,043 (2018), errata notice, 167 FERC ¶ 61,123, order on reh'g, Order No. 845-A, 166 FERC ¶ 61,137, errata notice, 167 FERC ¶ 61,124, order on reh'g, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

<sup>3</sup> Second Compliance Order at P 20.

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facilities did not address interconnection facilities that may also be contingent facilities pursuant to the *pro forma* Large Generator Interconnection Procedure ("LGIP") definition of contingent facilities.<sup>4</sup>

# B. Compliance

To comply with the Commission's order, the CAISO proposes to include a tariff provision regarding contingent interconnection facilities. This tariff provision clarifies the CAISO's interconnection studies identify when interconnection facilities are shared with or otherwise dependent upon other interconnection customers, such that delays could affect the interconnection customer's costs or timing.<sup>5</sup> The CAISO has always had this practice, but includes the tariff provision for compliance and transparency.<sup>6</sup>

# II. Material Modifications and Incorporation of Advanced Technologies

# A. Background

The Second Compliance Order found the CAISO's tariff partially complies with Order No. 845's requirement to provide a category of technological changes that do not constitute a material modification.<sup>7</sup> The Commission directed the CAISO to submit a further compliance filing that (1) provides a more detailed explanation of the assessment, and if necessary, studies the CAISO will conduct to determine whether the technological advancement request will result in a material modification; and (2) provides the CAISO will determine whether or not a technological advancement is a material modification within 30 calendar days of receipt of the initial request.

<sup>&</sup>lt;sup>4</sup> *Id* at P 25.

Proposed Section 6.5 of Appendix DD to the CAISO tariff. As this proceeding has well documented, the CAISO does not "restudy" projects similar to other ISO/RTOs. In other words, interconnection customers' delays or withdrawals do not cause the CAISO to restudy other customers. As such, that part of the *pro forma* LGIP is inapplicable. *See, e.g.*, AWEA Petition, p. 24, Docket No. RM15-21-000 (June 19, 2015) (advocating that the Commission adopt the CAISO's study approach); NextEra Comments, p. 9, Docket No. RM15-21-000 (Sep. 8, 2015) (advocating that the Commission adopt the CAISO's processes nationally "to break endless start and stop restudy cycles" elsewhere).

The CAISO notes that sharing interconnection facilities is very rare. Where it occurs, the same developer usually owns all the projects that would share the interconnection facilities.

<sup>&</sup>lt;sup>7</sup> Second Compliance Order at P 57.

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# B. Compliance

To comply with the Commission's order, the CAISO proposes to revise its tariff to state the CAISO will determine whether a change is a material modification no later than 30 days after the interconnection customer submits a Permissible Technological Advancement request.<sup>8</sup> Additionally, the CAISO has included additional language on the studies it may perform to determine whether any request for a Permissible Technological Advancement not already expressly listed in the tariff of Business Practice Manual will result in a Material Modification.<sup>9</sup> To ensure compliance, the CAISO's proposed study language is nearly identical to the relevant language the Commission approved for PJM Interconnection.<sup>10</sup>

#### III. eTariff Records

The Second Compliance Order found certain tariff records were supplanted due to overlapping tariff revisions and Commission orders. The Commission directed the CAISO to reinstate those tariff revisions as part of this filing to ensure the correct effective date. The CAISO has reinstated the relevant tariff records in other proceedings, but re-files them here to ensure the correct effective date.

# IV. Effective Date

The CAISO requests that the Commission accept the tariff revisions contained in this compliance filing effective February 20, 2020.

#### V. Service

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, all parties with scheduling

Proposed Section 6.7.2.4 of Appendix DD to the CAISO tariff. The Second Compliance Order approved the CAISO's proposed flat fee of \$2,500. However, the CAISO has moved that provision to a separate sentence to clarify the CAISO will determine whether a change is a material modification no later than 30 days after the interconnection customer submits the request materials.

<sup>9</sup> *Id.* 

Section 36.2A.2.2 of the PJM Open Access Transmission Tariff; see PJM Interconnection, Letter Order approving Compliance Filing, Docket No. ER19-1958-003 (Oct. 30, 2020). The CAISO has modified the language to use the CAISO's defined term, "Permissible Technological Advancement."

Second Compliance Order at P 26.

See CAISO, Compliance Filing, Docket No. ER20-732 (June 3, 2020); CAISO, Tariff Clarifications, Docket No. ER20-2374-000 (July 10, 2020), approved via letter order (September 4, 2020).

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coordinator agreements under the CAISO tariff, and all parties in this proceeding (Docket No. ER19-1950). In addition, the CAISO has posted a copy of the filing on the CAISO website.

# VI. Contents of Filing

Besides this transmittal letter, this compliance filing includes these attachments:

Attachment A Clean CAISO tariff sheets incorporating this

compliance filing; and

Attachment B Red-lined document showing the revisions in this

compliance filing.

# VII. Conclusion

For the reasons explained herein, the CAISO tariff, as modified by this compliance filing, satisfies the requirements of the Second Compliance Order and Order No. 845. The CAISO requests that the Commission accept this compliance filing effective February 20, 2020.

Respectfully submitted,

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Attachment A – Clean Tariff

Compliance Filing for FERC Order No. 845

California Independent System Operator

November 13, 2020

#### Section 6

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#### 6.2. Scope and Purpose of Phase I Interconnection Study

The Phase I Interconnection Study shall:

- (i) evaluate the impact of all Interconnection Requests received during the Cluster Application Window for a particular year on the CAISO Controlled Grid;
- (ii) preliminarily identify all LDNUs and RNUs needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, as Assigned Network Upgrades or Conditionally Assigned Network upgrades;
- (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities;
- (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs;
- establish the Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure for each Interconnection Request, until the issuance of the Phase II Interconnection Study report;
- (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request;
- (vii) provide a cost estimate of ADNUs for each Generating Facility in a Queue Cluster Group Study;
- (viii) identify controls required for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity;
- (ix) identify any Precursor Network Upgrades; and
- (x) identify RNUs as GRNUs or IRNUs.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak Deliverability Assessment (and Off-Peak Deliverability Assessment which will be for informational purposes only) for the purpose of identifying LDNUs and estimating the cost of ADNUs, as applicable.

The Phase I Interconnection Study will state for each Group Study or Interconnection

Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually.

The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of RNUs and LDNUs to the CAISO Controlled Grid that are preliminarily identified as Assigned Network Upgrades or Conditionally Assigned Network Upgrades required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, the estimated costs of ADNUs, if applicable and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds). For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Phase I Interconnection Study will consider the level of Interconnection Service Capacity requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns.

# 6.3 Identification of and Cost Allocation for Network Upgrades

# 6.3.1 Reliability Network Upgrades (RNUs).

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the RNUs needed to interconnect the Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by RNUs.

The cost of all RNUs identified in the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. The estimated costs of short circuit related GRNUs identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the short circuit duty contribution of each Generating Facility. The estimated costs of all other GRNUs identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request. The estimated costs of R N Us identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request.

Pursuant to Section 8.3, Interconnection Customers assigned IRNUs in their Phase I Interconnection Study will be allocated the full cost of the IRNUs in their Maximum Cost Responsibility. The Maximum Cost Exposure will include the full costs of conditionally assigned IRNUs. The Current Cost Responsibility will include their allocated share of IRNU costs as determined for RNUs in Section 8.3.

#### 6.3.2 Delivery Network Upgrades.

# 6.3.2.1 The On-Peak Deliverability Assessment.

The CAISO, in coordination with the applicable Participating TO(s), shall perform On-Peak Deliverability Assessments for Interconnection Customers selecting Full Capacity or Partial Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Generating Facility with Full Capacity or Partial Capacity Deliverability Status. The Deliverability Assessment will consist of two rounds, the first of which will identify any transmission constraints that limit the Deliverability of the Generating Facilities in the Group Study and will identify LDNUs to relieve the local constraints, and second of which will determine ADNUs to relieve the area constraints.

#### 6.3.2.1.1 Local Delivery Network Upgrades

The On-Peak Deliverability Assessment will be used to establish the Maximum Cost Responsibility and Maximum Cost Exposure for LDNUs for each Interconnection Customer selecting Full Capacity or Partial Capacity Deliverability Status. Deliverability of a new Generating Facility will be assessed on the same basis as all existing resources interconnected to the CAISO Controlled Grid.

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of LDNUs identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

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# 6.3.2.2 Off-Peak Deliverability Assessment.

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment to identify transmission upgrades in addition to those Delivery Network Upgrades identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions.

The transmission upgrades identified under this Section shall comprise those needed for the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, to be deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

The CAISO will perform the Off-Peak Deliverability Assessment for Interconnection Customer informational purposes only, and any such upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. The estimated costs of such upgrades identified in the assessment will be referred to as "off peak Deliverability transmission upgrades," the description of such upgrades in any report will be conceptual in nature, and such transmission upgrades will not be included as an Assigned Network Upgrade or Conditionally Assigned Network Upgrade within the applicable Interconnection Study report.

The cost of all transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. However, because these transmission upgrades shall be conceptual in nature only these upgrades shall be treated as follows:

- (i) these transmission upgrades will not be required for the proposed Generating Facility (or proposed increase in capacity) that is the subject to the Interconnection Request to achieve Full Capacity Deliverability Status;
- (ii) the estimated costs for these transmission upgrades shall not be assigned to any Interconnection Customer in an Interconnection Study report, such costs shall not be considered in determining the Current Cost Responsibility or Maximum Cost Responsibility of the Interconnection Customer for Network Upgrades under this or in determining the Interconnection Financial Security than an Interconnection Customer must post under Section 11;
- (iii) and the applicable Participating TO(s) shall not be responsible under this for financing or constructing such transmission upgrades.

# 6.4 Use of Per Unit Costs to Estimate Network Upgrade and PTO Interconnection Facilities Costs

Each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems.

These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop

the cost of Network Upgrades and Participating TO's Interconnection Facilities. Deviations from a Participating TO's benchmark per unit costs will be permitted if a reasonable explanation for the deviation is provided and there is no undue discrimination.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs. A schedule for the release and review of per unit costs is set forth in Appendix 5.

# 6.5 Assigned and Contingent Facilities

The CAISO and Participating TO will provide, upon request of the Interconnection Customer, its estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each Assigned Network Upgrade, Conditionally Assigned Network Upgrade, or Precursor Network Upgrade when this information is readily available and not commercially sensitive.

Interconnection Studies will identify when Interconnection Facilities are shared with, assigned to, or otherwise dependent upon other Interconnection Customers, such that delays could affect the Interconnection Customer's costs or timing.

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# 6.7 Phase I Interconnection Study Results Meeting

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#### 6.7.2 Modifications.

- 6.7.2.1 At any time during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.
- 6.7.2.2 At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the

Interconnection Request. After the issuance of the final Phase I Interconnection Study, but no later than ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt.

Modifications permitted under this Section shall include specifically:

- a decrease in the electrical output (MW) of the proposed project; through either (1) a decrease in Generating Facility Capacity or (2) a decrease in Interconnection Service Capacity (consistent with the process described in Section 3.1) accomplished by CAISO-approved limiting equipment;
- (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics;
- (c) modifying the interconnection configuration;
- (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in Section 3.5.1.4 and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld;
- (e) change in Point of Interconnection as set forth in Section 6.7.2.1;
- (f) change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status;
- (g) De minimis reductions in capacity pursuant to Section 7.5.13; and
- (h) Permissible Technological Advancements consistent with Section 6.7.2.4.

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2, and such costs shall be included in any CAISO invoice for modification assessment activities. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this Section, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this Section.

If any Interconnection Customer requested modification after the Phase II Interconnection Study report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO will issue a report to the Interconnection Customer. Potential adjustments to the Maximum Cost Responsibility or Maximum Cost Exposure for Network Upgrades for the Interconnection Customer will be determined in accordance with Section 7.4.3.

6.7.2.3 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ninety (90) total calendar days. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

6.7.2.4 Interconnection Customers may request Permissible Technological Advancements. Permissible Technological Advancements may include, for example, removing equipment; aligning the Commercial Operation Date with an executed power purchase agreement; adding less than 5 MW of energy storage once without increasing the net output at the Point of Interconnection; and other changes that have little or no potential to affect other Interconnection Customers or Affected Systems, require a new Interconnection Request, or otherwise require a re-study or evaluation. The CAISO will update its Business Practice Manual to list any additional Permissible Technological Advancement approved but not specifically enumerated here when identified. The

Interconnection Customer's written request to evaluate technological advancements must include the technical data required to assess the request. For all Permissible Technological Advancement requests not expressly enumerated in this Section or the Business Practice Manual, the CAISO and Participating TO will determine whether such change would constitute a Material Modification. Such evaluation will include an analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability, and impact on other Interconnection Customers. The CAISO will determine whether a Permissible Technological Advancement request is a Material Modification within thirty (30) calendar days of receipt of the request. Interconnection Customers requesting Permissible Technological Advancements must pay a non-refundable fee of \$2,500.

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#### Section 7

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# 7.3 Postings and Cost Estimates for Network Upgrades

Notwithstanding the Interconnection Customer's Maximum Cost Responsibility and Maximum Cost Exposure, until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, the allocated costs for Assigned Network Upgrades for each Interconnection Customer for RNUs and LDNUs in the Phase I Interconnection Study report shall establish the value for

- (i) each Interconnection Customer's Current Cost Responsibility; and
- the initial posting of Interconnection Financial Security required from each Interconnection Customer under Section 11.2 for such Network Upgrades.

#### 7.4 Reassessment Process

7.4.1 The CAISO will perform a reassessment of the Phase I Interconnection Study base case prior to the beginning of the GIDAP Phase II Interconnection Studies. The reassessment will evaluate the impacts on those Network Upgrades identified in previous interconnection studies and assumed in the Phase I Interconnection Study of:

- (a) Interconnection Request withdrawals occurring after the completion of the Phase II Interconnection Studies for the immediately preceding Queue Cluster:
- (b) Generator Downsizing Requests submitted in the most recent Generator Downsizing Request Window that meet the requirements set forth in Section 7.5, and Generating Facilities that are to have their generating capacities reduced pursuant to Sections 8.9.4, 8.9.5, and 8.9.6;
- (c) the performance of earlier queued Interconnection Customers with executed GIAs with respect to required milestones and other obligations;
- (d) changes in TP Deliverability allocations or Deliverability Status;
- (e) the results of the TP Deliverability allocation from the prior Interconnection Study cycle; and,
- (f) transmission additions and upgrades approved or removed in the most recent TPP cycle.

The reassessment will be used to develop the base case for the Phase II Interconnection Study

- 7.4.2 Where, as a consequence of the reassessment, the CAISO determines that changes to the previously identified Network Upgrades in Queue Clusters earlier than the current Interconnection Study Cycle will cause changes to plans of service set out in executed GIAs, such changes will serve as a basis for amendments to GIAs.
- 7.4.3 Such changes to plans of service in Queue Clusters earlier than the current Interconnection Study Cycle will also serve as the basis for potential adjustments to the Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure, as applicable, for Network Upgrades for Interconnection Customers in such earlier Queue Clusters, as follows:
  - (i) An Interconnection Customer shall be eligible for an adjustment to its Maximum Cost Responsibility for Network Upgrades if a reassessment undertaken pursuant to this Section 7.4 reduces its estimated cost responsibility for Network Upgrades by at least twenty (20) percent and \$1 million, as compared to its current Maximum Cost Responsibility for Network Upgrades based on its Interconnection Studies or a previous reassessment.

The Maximum Cost Responsibility for an Interconnection Customer who meets this eligibility criterion will be the lesser of (a) its current Maximum Cost Responsibility and (b) 100 percent of the costs of all remaining Assigned Network Upgrades included in the Interconnection Customer's plan of service.

- (ii) If an Interconnection Customer's Maximum Cost Responsibility for Network Upgrades is adjusted downward pursuant to (i) above, and a subsequent reassessment identifies a change on the CAISO's system that occurs after the completion of the Interconnection Customer's Interconnection Studies and requires additional or expanded Network Upgrades, resulting in an increase in the Interconnection Customer's estimated cost responsibility for Network Upgrades above the Maximum Cost Responsibility as adjusted based on the results of a prior reassessment, then the Interconnection Customer's Maximum Cost Responsibility for Network Upgrades will be the estimated cost responsibility determined in the subsequent reassessment, so long as this amount does not exceed the Maximum Cost Exposure established by the Interconnection Customer's Phase II Interconnection Study. In such cases, where the Current Cost Responsibility determined in the subsequent reassessment exceeds the Maximum Cost Responsibility as adjusted based on the results of a prior reassessment, the Interconnection Customer's Maximum Cost Responsibility for Network Upgrades shall not exceed the Maximum Cost Exposure established by its Interconnection Studies.
- (iii) To the extent the CAISO determines that previously identified Conditionally Assigned Network Upgrades become Precursor Network Upgrades pursuant to Section 14.2.2, or are otherwise removed, the CAISO will adjust the Interconnection Customer's Maximum Cost Exposure, as applicable.
- (iv) To the extent the CAISO determines that a Conditionally Assigned Network Upgrade becomes an Assigned Network Upgrade, the CAISO will adjust the Interconnection Customer's Current Cost Responsibility and Maximum Cost Responsibility, as applicable.
- (v) The posted Interconnection Financial Security required of the Interconnection Customer for Network Upgrades shall be adjusted to correspond to any increase in the Interconnection Customer's Current Cost Responsibility any time after but no later than sixty (60) calendar days after issuance of a reassessment report. The CAISO will notify an Interconnection Customer that receives a downward adjustment to its Current Cost Responsibility pursuant to this Section, and the Interconnection Customer may choose to adjust its posted Interconnection Financial Security within sixty (60) calendar days of the issuance of the reassessment report.

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# 7.5.11 Cost Allocation for Network Upgrades

A Downsizing Generator will continue to be obligated to finance the costs of (1) Network Upgrades that its Generating Facility previously triggered, and (2) Network Upgrades that are alternatives to the previously triggered Network Upgrades, if such previously triggered Network Upgrades or alternative Network Upgrades are needed by Interconnection Customers in the same Queue Cluster or later-queued Interconnection Customers, up to the Maximum Cost Exposure of the Downsizing Generator as determined by the CAISO Tariff interconnection study procedures applicable to the Downsizing Generator. For determining any changes to a Downsizing Generator's Network Upgrade cost responsibilities as a result of a reassessment process conducted pursuant to Section 7.4, the CAISO will reallocate the costs of Network Upgrades that are still needed based on the Downsizing Generator's pre-downsizing share of the original cost allocation.

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# 7.6 Application of Non-Refundable Amounts

In conjunction with each reassessment, the CAISO will calculate and disburse non-refundable interconnection study deposit and interconnection financial security amounts in accordance with the provisions of Appendix Y to the CAISO Tariff and this GIDAP as follows:

#### (a) Withdrawal Period

The CAISO shall calculate non-refundable interconnection study deposit and interconnection financial security amounts based on the period during which the interconnection customer withdrew its interconnection request or terminated its generator interconnection agreement. The first such withdrawal period shall be from January 1, 2013 through the last day that the CAISO is able to incorporate withdrawals into the 2015 annual reassessment. Subsequently, each withdrawal period shall be the approximate twelve-month period between the last day that the CAISO is able to incorporate withdrawals into an annual reassessment and the last day that the CAISO is able to incorporate withdrawals into the subsequent year's reassessment.

For each withdrawal period, the CAISO shall calculate and disburse available non-refundable interconnection study deposits and interconnection financial security in conjunction with the annual reassessment performed during the year that the withdrawal period ends.

(b) Calculation and Disbursement of Non-Refundable Interconnection Financial Security for Still-Needed Network Upgrades At or Above \$100,000 Threshold

For each interconnection customer that withdrew its interconnection request or terminated its generator interconnection agreement, the CAISO shall calculate the proportion of the non-refundable Interconnection Financial Security that is attributable to Network Upgrades that the CAISO determines will still be needed by remaining Interconnection Customers. For each such still-needed Network Upgrade, the CAISO will divide the Interconnection Customer's Current Cost Responsibility for the Network Upgrade by the Interconnection Customer's total Current Cost Responsibility for all Network Upgrades and multiply this result by the Interconnection Customer's total amount of non-refundable Interconnection Financial Security.

If the amount of non-refundable security attributable to a still-needed Network Upgrade, for all Interconnection Customers that withdrew during the same withdrawal period, is equal to or greater than \$100,000, then the portion of such amount held or received by the CAISO prior to the stage of the applicable annual reassessment in which the CAISO reallocates cost responsibility for remaining Network Upgrades shall: (a) be disbursed to the applicable Participating TO(s) as a contribution in aid of construction of the still-needed Network Upgrade, and (b) be reflected as a reduction in the cost of this Network Upgrade for purposes of reallocating the cost responsibility for this Network Upgrade. Any portions of such amounts that the CAISO receives after reallocating cost responsibility for remaining Network Upgrades during the applicable annual reassessment shall be disbursed by the CAISO in the same manner in a subsequent reassessment, based on the date of collection, unless the applicable Network Upgrade is no longer needed, in which case such amounts will be disbursed pursuant to Section 7.6(c).

If a Network Upgrade for which the CAISO disburses funds as a contribution in aid of construction under this Section 7.6(b) is determined, in a subsequent reassessment, to be no longer needed, such funds will be promptly returned to the CAISO by the applicable Participating TO and re-disbursed by the CAISO pursuant to Section 7.6(c).

(c) Calculation and Disbursement of All Other Non-Refundable Security and Study Deposits

For each Interconnection Customer that withdrew its Interconnection Request or terminated its Generator Interconnection Agreement during a withdrawal period, any non-refundable Interconnection Study Deposits, as well as any non-refundable Interconnection Financial Security not disbursed pursuant to subsection (b) above, shall be applied to offset Regional Transmission Revenue Requirements, as recovered through the CAISO's Transmission Access Charge, and to offset Local Transmission Revenue Requirements. Any non-refundable Interconnection Financial Security and Interconnection Study Deposits relating to withdrawals or terminations that occurred prior to January 1, 2013 that are collected by the CAISO during a withdrawal period, as defined in Section 7.6(a), will also be disbursed in accordance with this provision.

This offset shall be performed by first allocating these non-refundable Interconnection Study Deposit and Interconnection Financial Security amounts to the following three categories in proportion to the Interconnection Customer's most recent Current Cost Responsibility, prior to withdrawal or termination, for Network Upgrades whose costs would be recovered through each of the following categories: (1) a Regional Transmission Revenue Requirement, (2) the Local Transmission Revenue Requirement of the Participating TO to which the interconnection customer had proposed to interconnect, and (3) the Local Transmission Revenue Requirement of any other Participating TO on whose system the interconnection customer was responsible for funding Network Upgrades recovered through a Local Transmission Revenue Requirement.

Each year, prior to the cutoff date for including annual regional TRBA adjustments in Regional Transmission Revenue Requirements, the CAISO will disburse to each Participating TO's Transmission Revenue Balancing Account: (a) a share of the total funds held or received by the CAISO from category (1) above in proportion to the ratio of each Participating TO's most recent Regional Transmission Revenue Requirement to the total of all Participating TOs' most recent Regional Transmission Revenue Requirements, and (b) all funds held or received by the CAISO in categories (2) and (3) applicable to that Participating TO.

- (d) Disbursement of Funds by CAISO; Participating TO Responsibility for Collection
  - The CAISO shall disburse, in accordance with the rules set forth in this Section 7.6, only those non-refundable Interconnection Financial Security and Study Deposit amounts that it holds or has received. The applicable Participating TO shall have the exclusive obligation to administer the collection of any non-refundable financial security where the applicable Participating TO is a beneficiary. The applicable Participating TO has the responsibility to manage the financial security and to transmit to the CAISO the non-refundable amounts in cash or equivalent within 75 days of the CAISO's submission to the Participating TO of the financial security liquidation form. This deadline can be modified by mutual agreement of the CAISO and applicable Participating TO.
- (e) The CAISO shall, upon receipt, deposit all non-refundable Interconnection Financial Security and Interconnection Study Deposit amounts in an interestbearing account at a bank or financial institution designated by the CAISO. Any interest earned on such amounts, based on the actual rate of the account, shall be allocated and disbursed in the same manner as the principal, in accordance with the methodology set forth in this Section 7.6.

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# 8.1 Scope of Phase II Interconnection Study

### 8.1.1 Purpose of the Phase II Interconnection Study

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. The Phase II Interconnection Study shall:

- update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests from the current Queue Cluster;
- (ii) identify final GRNUs and IRNUs needed in order to achieve Commercial Operation status for the Generating Facilities and provide final cost estimates;
- (iii) identify final LDNUs needed to interconnect those Generating Facilities selecting Full Capacity or Partial Capacity Deliverability Status and provide final cost estimates;
- (iv) identify final ADNUs for Interconnection Customers selecting Option (B), as provided below and provide revised cost estimates;
- identify, for each Interconnection Request, the Participating TO's Interconnection Facilities for the final Point of Interconnection and provide a +/-20% cost estimate;
- (vi) coordinate in-service timing requirements based on operational studies in order to facilitate achievement of the Commercial Operation Dates of the Generating Facilities:
- identify any potential control equipment for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity;
- (viii) update the Interconnection Customers Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure, as applicable; and
- (ix) provide updated Precursor Network Upgrades needed to achieve the Commercial Operation status and Deliverability Status for the Generating Facilities.

The Phase II Interconnection Study report shall set forth the applicable cost estimates for Network Upgrades and Participating TOs Interconnection Facilities that shall be the basis for Interconnection Financial Security Postings under Section 11.3. Where the Maximum Cost Responsibility is based upon the Phase I Interconnection Study (because it is lower under Section 10.1), the Phase II Interconnection Study report shall recite this fact.

To the extent the CAISO determines that previously identified Conditionally Assigned Network Upgrades become Precursor Network Upgrades pursuant to Section 14.2.2, or

are otherwise removed, the CAISO will reduce the Interconnection Customer's Maximum Cost Exposure, as applicable. To the extent the CAISO determines that a Conditionally Assigned Network Upgrade becomes an Assigned Network Upgrade, the CAISO will adjust the Interconnection Customer's Current Cost Responsibility and Maximum Cost Responsibility.

\* \* \* \* \*

# 8.3 Cost Responsibility for Reliability Network Upgrades

Cost responsibility for final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request shall be assigned to Interconnection Customers regardless of whether the Interconnection Customer has selected Option (A) or (B) or Energy Only Deliverability Status, as follows:

- (i) The cost responsibility for final short circuit related General Reliability Network Upgrades shall be assigned to all Interconnection Requests in the Group Study proportional to the short circuit duty contribution of each Generating Facility.
- (ii) The cost responsibility for all other final General Reliability Network Upgrades shall be assigned to all Interconnection Requests in that Group Study proportional to the basis of the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.
- (iii) The Interconnection Customer's Current Cost Responsibility will include its allocated cost share for Interconnection Reliability Network Upgrades that are Assigned Network Upgrades. The CAISO will allocate assigned Interconnection Reliability Network Upgrade costs proportional to the number of Interconnection Requests that have been assigned the Interconnection Reliability Network Upgrade in the current Queue Cluster.
- (iv) The Interconnection Customer's Maximum Cost Responsibility will include the full cost of Assigned Network Upgrades that are Interconnection Reliability Network Upgrades unless another Interconnection Customer in the same Queue makes its third Interconnection Financial Security posting for the same assigned Interconnection Reliability Network Upgrade, in which case the CAISO will reduce the Interconnection Customer's Maximum Cost Responsibility to its allocated share pursuant to subsection (iii).
- (v) The Maximum Cost Exposure will include the full cost of Interconnection Reliability Network Upgrades that are Assigned Network Upgrades and Conditionally Assigned Network Upgrades. The CAISO may reduce the Maximum Cost Exposure consistent with subsection (iv).

#### 8.4 Cost Responsibility for Delivery Network Upgrades

The cost responsibility for Local Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of the Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status, regardless of whether the Interconnection Customer has selected Option (A) or (B), based on the flow impact of each such Generating Facility on each Local Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The cost responsibility for Area Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to Interconnection Customers who have selected Option (B) Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on each Area Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The Current Cost Responsibility provided in the Phase II Interconnection Study shall establish the basis for the second Interconnection Financial Security Posting for Interconnection Customers selecting Option (B).

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#### 8.9.2.2 Proceeding without a Power Purchase Agreement

Interconnection Customers only may attest that they are proceeding without a power purchase agreement in the allocation cycle immediately following receipt of their Phase II Interconnection Study (without having parked). Interconnection Customers that receive TP Deliverability in this group may park only that portion of their Interconnection Request that does not receive TP Deliverability. Parked portions may receive TP Deliverability in subsequent allocation cycles from any group for which they qualify. Interconnection Customers that receive TP Deliverability allocations for less than requested may elect to reduce their capacity to the amount of TP Deliverability received following the allocation.

If an Interconnection Customer receives TP Deliverability on the basis that it is proceeding without a power purchase agreement, it must accept the TP Deliverability allocation and forego parking that capacity, or withdraw. If an Interconnection Customer receives TP Deliverability on the basis that it is proceeding without a power purchase agreement, it may not request suspension under its GIA, delay providing its notice to proceed as specified in its GIA, or modify its Commercial Operation Date beyond the earlier of (a) the date established in its Interconnection Request when it requests TP Deliverability or (b) seven (7) years from the date the CAISO received its Interconnection Request. Extensions due to Participating TO construction delays will extend these deadlines equally. Interconnection Customers that fail to proceed toward their Commercial Operation Date under these requirements and as specified in their GIA will be converted to Energy Only. Interconnection Customers that become Energy Only for this or any reason may not reduce their Maximum Cost Responsibility, Current Cost

Responsibility, or Interconnection Financial Security for any assigned Delivery Network Upgrades unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers.

This Section 8.9.2.2 does not apply to Interconnection Customers that attested to balance-sheet financing or otherwise receiving a commitment of project financing before November 27, 2018, or that do so pursuant to Section 8.9.3.1.

# 8.9.3 Retaining TP Deliverability Allocation

For Interconnection Customers in Queue Cluster 10 or later, once a Generating Facility is allocated TP Deliverability under Section 8.9.1, the Interconnection Customer annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

- (1) The Generating Facility is in good standing with respect to the criteria on which the allocation of TP Deliverability was based;
- (2) If the Generating Facility received TP Deliverability on the basis of having executed a power purchase agreement, it must have received regulatory approval of that agreement;
- (3) If the Generating Facility received TP Deliverability on the basis of negotiating or being shortlisted for a power purchase agreement, it must have executed the agreement by November 30 of the year it received TP Deliverability. It must then comply with criterion 8.9.3(2) the following year;
- (4) If the Interconnection Customer has executed a GIA, it must remain in good standing with regard to its GIA, such that neither the Participating TO nor CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA that has not been cured and the Interconnection Customer has not commenced curative actions:
- (5) The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension is required for reasons beyond the control of the Interconnection Customer or such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities

The Interconnection Customer will provide the required information in the form of an affidavit as described in the Business Practice Manual. Interconnection Customers that fail to meet these criteria will become Energy Only for that portion of the Generating Facility that has not retained TP Deliverability. An Interconnection Customer's failure to retain its TP Deliverability will not be considered a Breach of its GIA. Except as provided in Section 8.9.3.2, Interconnection Customers that become Energy Only for failure to retain their TP Deliverability Allocation may not reduce their Maximum Cost Responsibility, Current Cost Responsibility, or Interconnection Financial Security for any

assigned Delivery Network Upgrades unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers. To the extent TP Deliverability has been allocated, lost, or relinquished only for a portion of the Interconnection Customer's project, this section 8.9.3 will apply to that portion of the project only.

# 8.9.3.1 Retaining TP Deliverability Allocation for Pre-Cluster 10 Interconnection Customers

Interconnection Customers in Queue Cluster 9 or earlier subject to this Appendix DD that have been allocated TP Deliverability or that parked pursuant to Section 8.9.4 or 8.9.4.1, annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

- (1) The Generating Facility is in good standing with respect to the criteria on which the allocation of TP Deliverability was based;
- (2) If the Generating Facility received TP Deliverability on the basis of negotiating or being shortlisted for a power purchase agreement, it must have executed the agreement by the start of the next allocation cycle, or attest to balance-sheet financing or receipt of a commitment of project financing;
- (3) If the Interconnection Customer has executed a GIA, it must remain in good standing with regard to its GIA, such that neither the Participating TO nor CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA that has not been cured and the Interconnection Customer has not commenced curative actions;
- (4) The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension is required for reasons beyond the control of the Interconnection Customer or such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities.

Interconnection Customers that have attested to balance-sheet financing or receipt of a commitment of project financing or do so pursuant to this Section are not subject to Section 8.9.2.2. Interconnection Customers that attest to balance-sheet financing pursuant to this Section 8.9.3.1 will be placed in TP Deliverability allocation group 8.9.2(3).

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8.9.5 Partial Allocations of Transmission Based Deliverability to Option (A) and Option (B) Generating Facilities

If a Generating Facility is allocated TP Deliverability in the current Interconnection Study Cycle in an amount less than the amount of Deliverability requested, then the Interconnection Customer must choose one of the following options:

- (i) Accept the allocated amount of TP Deliverability and reduce the MW generating capacity of the proposed Generating Facility such that the allocated amount of TP Deliverability will provide Full Capacity Deliverability Status to the reduced generating capacity;
- (ii) Accept the allocated amount of TP Deliverability and adjust the Deliverability status of the proposed Generating Facility to achieve Partial Capacity Deliverability corresponding to the allocated TP Deliverability;
- (iii) For Option (A) Generating Facilities, accept the allocated amount of TP Deliverability and seek additional TP Deliverability for the remainder of the requested Deliverability of the Interconnection Request in the next allocation cycle. In such instance, the Interconnection Customer shall execute a GIA for the entire Generating Facility having Partial Capacity Deliverability corresponding to the allocated amount of TP Deliverability. Following the next cycle of TP Deliverability allocation, the GIA shall be amended as needed to adjust its Deliverability status to reflect any additional allocation of TP Deliverability. At this time the Interconnection Customer may also adopt options (i) or (ii) above based on the final amount of TP Deliverability allocated to the Generating Facility. There will be no further opportunity for this Generating Facility to participate in any subsequent cycle of TP Deliverability allocation; or
- (iv) Decline the allocated amount of TP Deliverability and either withdraw the Interconnection Request or convert to Energy Only Deliverability Status. An Interconnection Customer having an Option (A) Generating Facility that has not previously parked may decline the allocation of TP Deliverability and park until the next cycle of TP Deliverability allocation in the next Interconnection Study Cycle.

An Interconnection Customer that selects option (iii) or (iv) above may, at the time it selects the option, elect to reduce the generating capacity of its Generating Facility.

Interconnection Customers accepting a partial allocation of TP Deliverability may pursue additional deliverability as described in Section 8.9.2.

# 8.9.6 Declining TP Deliverability Allocation

An Interconnection Customer having an Option (A) Generating Facility and allocated the entire amount of requested TP Deliverability may decline all or a portion of the TP Deliverability allocation and park the Generating Facility Request as described in Section 8.9.4(3). An Interconnection Customer that selects this option may, at the time it selects the option, elect to reduce the generating capacity of its Generating Facility.

# 8.9.7 [Intentionally Omitted]

#### 8.9.8 Updates to Phase II Interconnection Study Results

Upon completion of the allocation of TP Deliverability in accordance with Section 8.9.2, the ISO will provide the allocation results to the Interconnection Customers for eligible Generating Facilities in the current Queue Cluster and eligible parked Generating Facilities. Each of these Interconnection Customers will then have seven (7) calendar days to inform the ISO of its decisions in accordance with Sections 8.9.4, 8.9.5, and 8.9.6. Following the ISO's receipt of this information from all affected Interconnection Customers, the ISO will provide updates where needed to the Phase II Interconnection Study reports for all Generating Facilities whose Network Upgrades have been affected.

#### 8.9.9 Deliverability Transfers

Deliverability may not be assigned or otherwise transferred except as expressly provided by the CAISO Tariff. An Interconnection Customer may reallocate its Generating Facility's Deliverability among its own Generating Units or Resource IDs at the Generating Facility. The Generating Units must be located at the same Point of Interconnection and operate under the same GIA. The Generating Facility's aggregate output as evaluated in the Deliverability Assessment cannot increase as the result of any transfer, but may decrease based on the assignee's characteristics and capacity. The CAISO will inform the Interconnection Customer of each Generating Unit's Deliverability Status and associated capacity as the result of any transfer. The results will be based on the current Deliverability Assessment methodology.

An Interconnection Customer may request to reallocate its Deliverability among its Generating Units pursuant to Section 6.7.2.2 of this GIDAP, Article 5.19 of the LGIA, and Article 3.4.5 of the SGIA, as applicable. A repowering Interconnection Customer may transfer Deliverability as part of the repowering process pursuant to Section 25.1.2 of the CAISO Tariff. An Interconnection Customer expanding its capacity behind-the-meter pursuant to Section 4.2.1.2 also may transfer Deliverability as part of that process, or subsequently under the other processes in this Section.

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Attachment B – Marked Tariff

Compliance Filing for FERC Order No. 845

California Independent System Operator

November 13, 2020

#### Section 6

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# 6.2. Scope and Purpose of Phase I Interconnection Study

The Phase I Interconnection Study shall:

- (i) evaluate the impact of all Interconnection Requests received during the Cluster Application Window for a particular year on the CAISO Controlled Grid;
- (ii) preliminarily identify all LDNUs and RNUs -needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, as Assigned Network Upgrades or Conditionally Assigned Network upgrades:
- (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities;
- (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs;
- (v) establish the <u>Current Cost Responsibility, M</u>maximum <u>Ceost rResponsibility, and Maximum Cost Exposure</u> for <u>LDNUs and RNUs assigned to each Interconnection Request, until the issuance of the Phase II Interconnection Study report:</u>
- (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.
- (vii) provide a cost estimate of ADNUs for each Generating Facility in a Queue Cluster Group Study; and
- (viii) identify controls required for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity;-
- (ix) identify any Precursor Network Upgrades; and
- (x) identify RNUs as GRNUs or IRNUs.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak Deliverability Assessment (and Off-Peak Deliverability Assessment which will be for informational purposes only) for the purpose of identifying LDNUs and estimating the cost of ADNUs, as applicable.

The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually.

The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of RNUs and LDNUs to the CAISO Controlled Grid that are preliminarily identified as <a href="Assigned Network Upgrades">Assigned Network Upgrades</a> required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, the estimated costs of ADNUs, if applicable and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds). For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Phase I Interconnection Study will consider the level of Interconnection Service Capacity requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns.

#### 6.3 Identification of and Cost Allocation for Network Upgrades

# 6.3.1 Reliability Network Upgrades (RNUs).

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the RNUs needed to interconnect the Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by RNUs.

The cost of all RNUs identified in the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. The estimated costs of short circuit related GRNUs identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the short circuit duty contribution of each Generating Facility. The estimated costs of all other GRNUs identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request. The estimated costs of R N Us identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request.

Pursuant to Section 8.3, Interconnection Customers assigned IRNUs in their Phase I Interconnection Study will be allocated the full cost of the IRNUs in their Maximum Cost Responsibility. The Maximum Cost Exposure will include the full costs of conditionally assigned IRNUs. The Current Cost Responsibility will include their allocated share of IRNU costs as determined for RNUs in Section 8.3.

#### 6.3.2 Delivery Network Upgrades.

# 6.3.2.1 The On-Peak Deliverability Assessment.

The CAISO, in coordination with the applicable Participating TO(s), shall perform On-Peak Deliverability Assessments for Interconnection Customers selecting Full Capacity or Partial Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Generating Facility with Full Capacity or Partial Capacity Deliverability Status. The Deliverability Assessment will consist of two rounds, the first of which will identify any transmission constraints that limit the Deliverability of the Generating Facilities in the Group Study and will identify LDNUs to relieve the local constraints, and second of which will determine ADNUs to relieve the area constraints.

#### 6.3.2.1.1 Local Delivery Network Upgrades

The On-Peak Deliverability Assessment will be used to establish the Mmaximum Ceost Responsibility and Maximum Cost Exposure for LDNUs for each Interconnection Customer selecting Full Capacity or Partial Capacity Deliverability Status. Deliverability of a new Generating Facility will be assessed on the same basis as all existing resources interconnected to the CAISO Controlled Grid.

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of LDNUs identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

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#### 6.3.2.2 Off-Peak Deliverability Assessment.

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment to identify transmission upgrades in addition to those Delivery Network Upgrades identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions.

The transmission upgrades identified under this Section shall comprise those needed for the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, to be deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

The CAISO will perform the Off-Peak Deliverability Assessment for Interconnection Customer informational purposes only, and any such upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. The estimated costs of such upgrades identified in the assessment will be referred to as "off peak Deliverability transmission upgrades," the description of such upgrades in any report will be conceptual in nature, and such transmission upgrades will not be included inas an Assigned Network Upgrade or Conditionally Assigned Network Upgrade plan of service within the applicable Interconnection Study report.

The cost of all transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. However, because these transmission upgrades shall be conceptual in nature only these upgrades shall be treated as follows:

- (i) these transmission upgrades will not be required for the proposed Generating Facility (or proposed increase in capacity) that is the subject to the Interconnection Request to achieve Full Capacity Deliverability Status;
- the estimated costs for these transmission upgrades shall not be assigned to any Interconnection Customer in an Interconnection Study report, such costs shall not be considered in determining the <a href="Current Ceost R-responsibility">Current Ceost R-responsibility or Mmaximum Ceost R-responsibility of the Interconnection Customer for Network Upgrades under this or in determining the Interconnection Financial Security than an Interconnection Customer must post under Section 11;
- (iii) and the applicable Participating TO(s) shall not be responsible under this for financing or constructing such transmission upgrades.

# 6.4 Use of Per Unit Costs to Estimate Network Upgrade and PTO Interconnection Facilities Costs

Each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems.

These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop

the cost of RNUs, LDNUs, ADNUs Network Upgrades and Participating TO's Interconnection Facilities. Deviations from a Participating TO's benchmark per unit costs will be permitted if a reasonable explanation for the deviation is provided and there is no undue discrimination.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs. A schedule for the release and review of per unit costs is set forth in Appendix 5.

#### 6.5 Assigned and Contingent Facilities

The CAISO and Participating TO will provide, upon request of the Interconnection Customer, its estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each Assigned Network Upgrade, Conditionally Assigned Network Upgrade, or Precursor Network Upgrade when this information is readily available and not commercially sensitive.

Interconnection Studies will identify when Interconnection Facilities are shared with, assigned to, or otherwise dependent upon other Interconnection Customers, such that delays could affect the Interconnection Customer's costs or timing.

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# 6.7 Phase I Interconnection Study Results Meeting

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#### 6.7.2 Modifications.

- 6.7.2.1 At any time during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.
- 6.7.2.2 At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the

Interconnection Request. After the issuance of the final Phase I Interconnection Study, but no later than ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt.

Modifications permitted under this Section shall include specifically:

- a decrease in the electrical output (MW) of the proposed project; through either (1) a decrease in Generating Facility Capacity or (2) a decrease in Interconnection Service Capacity (consistent with the process described in Section 3.1) accomplished by CAISO-approved limiting equipment;
- (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics;
- (c) modifying the interconnection configuration;
- (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in Section 3.5.1.4 and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld;
- (e) change in Point of Interconnection as set forth in Section 6.7.2.1;
- (f) change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status;
- (g) De minimis reductions in capacity pursuant to Section 7.5.13; and
- (h) Permissible Technological Advancements consistent with Section 6.7.2.4.

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2, and such costs shall be included in any CAISO invoice for modification assessment activities. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this Section, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this Section.

If any Interconnection Customer requested modification after the Phase II Interconnection Study report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO will issue a report to the Interconnection Customer. Potential adjustments to the Memaximum Ceost Responsibility or Maximum Cost Exposure for Network Upgrades for the Interconnection Customer will be determined in accordance with Section 7.4.3.

6.7.2.3 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ninety (90) total calendar days. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

6.7.2.4 Interconnection Customers may request Permissible Technological Advancements. Permissible Technological Advancements may include, for example, removing equipment; aligning the Commercial Operation Date with an executed power purchase agreement; adding less than 5 MW of energy storage once without increasing the net output at the Point of Interconnection; and other changes that have little or no potential to affect other Interconnection Customers or Affected Systems, require a new Interconnection Request, or otherwise require a re-study or evaluation. The CAISO will update its Business Practice Manual to list any additional Permissible Technological Advancement approved but not specifically enumerated here when identified. The

Interconnection Customer's written request to evaluate technological advancements must include the technical data required to assess the request and a non-refundable fee of \$2,500. For all Permissible Technological Advancement requests not expressly enumerated in this Section or the Business Practice Manual, the CAISO and Participating TO will determine whether such change would constitute a Material Modification. Such evaluation will include an analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability, and impact on other Interconnection Customers. The CAISO will determine whether a Permissible Technological Advancement request is a Material Modification within thirty (30) calendar days of receipt of the request. Interconnection Customers requesting Permissible Technological Advancements must pay a non-refundable fee of \$2,500. Within thirty (30) calendar days of the Interconnection Customer's completed request, the CAISO, in consultation with the Participating TO, will notify the Interconnection Customer whether the request constitutes an approved Permissible Technological Advancement, or why the Interconnection Customer must submit a modification request pursuant to Section 6.7.2.3.

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# Section 7

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# 7.3 Postings and Cost Estimates for Network Upgrades

Notwithstanding the Interconnection Customer's Maximum Cost Responsibility and Maximum Cost Exposure, uUntil such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, the allocated costs for Aassigned Network Upgrades to for each Interconnection Customers for RNUs and LDNUs in the Phase I Interconnection Study report shall establish the maximum value for

- (i) each Interconnection Customer's <u>Current Ceost Responsibility</u>; and
- (ii) the initial posting of Interconnection Financial Security required from each Interconnection Customer under Section 11.2 for such Network Upgrades.

The Phase I Interconnection Study report shall set forth the applicable cost estimates for RNUs, LDNUs, ADNUs and Participating TOs Interconnection Facilities that shall be the basis for the initial Interconnection Financial Security Posting under Section 11.2.

#### 7.4 Reassessment Process

- 7.4.1 The CAISO will perform a reassessment of the Phase I Interconnection Study base case prior to the beginning of the GIDAP Phase II Interconnection Studies. The reassessment will evaluate the impacts on those Network Upgrades identified in previous interconnection studies and assumed in the Phase I Interconnection Study of:
  - Interconnection Request withdrawals occurring after the completion of the Phase II Interconnection Studies for the immediately preceding Queue Cluster;
  - (b) Generator Downsizing Requests submitted in the most recent Generator Downsizing Request Window that meet the requirements set forth in Section 7.5, and Generating Facilities that are to have their generating capacities reduced pursuant to Sections 8.9.4, 8.9.5, and 8.9.6;
  - (c) the performance of earlier queued Interconnection Customers with executed GIAs with respect to required milestones and other obligations;
  - (d) changes in TP Deliverability allocations or Deliverability Status;
  - the results of the TP Deliverability allocation from the prior Interconnection Study cycle; and,
  - (f) transmission additions and upgrades approved <u>or removed</u> in the most recent TPP cycle.

The reassessment will be used to develop the base case for the Phase II Interconnection Study

- 7.4.2 Where, as a consequence of the reassessment, the CAISO determines that changes to the previously identified Network Upgrades in Queue Clusters earlier than the current Interconnection Study Cycle will cause changes to plans of service set out in executed GIAs, such changes will serve as a basis for amendments to GIAs.
- 7.4.3 Such changes to plans of service in Queue Clusters earlier than the current Interconnection Study Cycle will also serve as the basis for potential adjustments to the Current Cost Responsibility, Mmaximum Ceost Responsibility, and Maximum Cost Exposure, as applicable, for Network Upgrades for Interconnection Customers in such earlier Queue Clusters, as follows:
  - (i) An Interconnection Customer shall be eligible for an adjustment to its Mmaximum Ccost Rresponsibility for Network Upgrades if a reassessment undertaken pursuant to this Section 7.4 reduces its estimated cost responsibility for Network Upgrades by at least

twenty (20) percent and \$1 million, as compared to its current Mmaximum Ceost Rresponsibility for Network Upgrades based on its Interconnection Studies or a previous reassessment.

The Mmaximum Ceost Rresponsibility for an Interconnection Customer who meets this eligibility criterion will be the lesser of (a) its current Mmaximum Ceost Rresponsibility and (b) 100 percent of the costs of all remaining Assigned Network Upgrades included in the Interconnection Customer's plan of service.

- (ii) If an Interconnection Customer's Mmaximum Ceost Rresponsibility for Network Upgrades is adjusted downward pursuant to (i) above, and a subsequent reassessment identifies a change on the CAISO's system that occurs after the completion of the Interconnection Customer's Interconnection Studies and requires additional or expanded Network Upgrades, resulting in an increase in the Interconnection Customer's estimated cost responsibility for Network Upgrades above the Mmaximum Ceost Rresponsibility as adjusted based on the results of a prior reassessment, then the Interconnection Customer's Mmaximum Ceost Rresponsibility for Network Upgrades will be the estimated cost responsibility determined in the subsequent reassessment, so long as this amount does not exceed the Mmaximum Ceost Exposureresponsibility originally established by the Interconnection Customer's Phase II Interconnection Studyies. In such cases, where the estimated Current Ceost Rresponsibility determined in the subsequent reassessment exceeds the Mmaximum Ceost Rresponsibility as adjusted based on the results of a prior reassessment, the Interconnection Customer's Mmaximum Coost Rresponsibility for Network Upgrades shall not exceedbe the Mmaximum Ceost responsibility Exposure established by its Interconnection Studies.
- (iii) To the extent the CAISO determines that previously identified

  Conditionally Assigned Network Upgrades become Precursor

  Network Upgrades pursuant to Section 14.2.2, or are otherwise
  removed, the CAISO will adjust the Interconnection Customer's
  Maximum Cost Exposure, as applicable.
- (iv) To the extent the CAISO determines that a Conditionally Assigned

  Network Upgrade becomes an Assigned Network Upgrade, the

  CAISO will adjust the Interconnection Customer's Current Cost

  Responsibility and Maximum Cost Responsibility, as applicable.
- The posted Interconnection Financial Security required of the Interconnection Customer for Network Upgrades shall be adjusted to correspond to any increase in the Interconnection Customer's estimated Current Ceost Responsibility any time after but no later than sixty (60) calendar days after issuance of a reassessment

report. The CAISO will notify an Interconnection Customer that receives a downward adjustment to its <u>Ceurrent maximum Ceost Rresponsibility</u> pursuant to this Section, and the Interconnection Customer may choose to adjust its posted Interconnection Financial Security within sixty (60) calendar days of the issuance of the reassessment report.

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# 7.5.11 Cost Allocation for Network Upgrades

A Downsizing Generator will continue to be obligated to finance the costs of (1) Network Upgrades that its Generating Facility previously triggered, and (2) Network Upgrades that are alternatives to the previously triggered Network Upgrades, if such previously triggered Network Upgrades or alternative Network Upgrades are needed by Interconnection Customers in the same Queue Cluster or later-queued Interconnection Customers, up to the total-Maximum Ceost Exposureresponsibility of the Downsizing Generator as determined by the CAISO Tariff interconnection study procedures applicable to the Downsizing Generator. For determining any changes to a Downsizing Generator's Network Upgrade cost responsibilities as a result of a reassessment process conducted pursuant to Section 7.4, the CAISO will reallocate the costs of Network Upgrades that are still needed based on the Downsizing Generator's pre-downsizing share of the original cost allocation.

\* \* \* \* \*

# 7.6 Application of Non-Refundable Amounts

In conjunction with each reassessment, the CAISO will calculate and disburse non-refundable interconnection study deposit and interconnection financial security amounts in accordance with the provisions of Appendix Y to the CAISO Tariff and this GIDAP as follows:

### (a) Withdrawal Period

The CAISO shall calculate non-refundable interconnection study deposit and interconnection financial security amounts based on the period during which the interconnection customer withdrew its interconnection request or terminated its generator interconnection agreement. The first such withdrawal period shall be

from January 1, 2013 through the last day that the CAISO is able to incorporate withdrawals into the 2015 annual reassessment. Subsequently, each withdrawal period shall be the approximate twelve-month period between the last day that the CAISO is able to incorporate withdrawals into an annual reassessment and the last day that the CAISO is able to incorporate withdrawals into the subsequent year's reassessment.

——For each withdrawal period, the CAISO shall calculate and disburse available non-refundable interconnection study deposits and interconnection financial security in conjunction with the annual reassessment performed during the year that the withdrawal period ends.

(b) Calculation and Disbursement of Non-Refundable Interconnection Financial Security for Still-Needed Network Upgrades At or Above \$100,000 Threshold

For each interconnection customer that withdrew its interconnection request or terminated its generator interconnection agreement, the CAISO shall calculate the proportion of the non-refundable Linterconnection Ffinancial Security that is attributable to Network Upgrades that the CAISO determines will still be needed by remaining interconnection eCustomers. For each such still-needed Network Upgrade, the CAISO will divide the Linterconnection Ceustomer's estimatedCurrent Ceost Responsibility for the Network Upgrade by the Linterconnection Ceustomer's estimated total Current Ceost Responsibility for all Network Upgrades and multiply this result by the Linterconnection Ceustomer's total amount of non-refundable Linterconnection Ffinancial Security.

If the amount of non-refundable security attributable to a still-needed Network Upgrade, for all Linterconnection Ceustomers that withdrew during the same withdrawal period, is equal to or greater than \$100,000, then the portion of such amount held or received by the CAISO prior to the stage of the applicable annual reassessment in which the CAISO reallocates cost responsibility for remaining Network Upgrades shall: (a) be disbursed to the applicable Participating TO(s) as a contribution in aid of construction of the still-needed Network Upgrade, and (b) be reflected as a reduction in the cost of this Network Upgrade for purposes of reallocating the cost responsibility for this Network Upgrade. Any portions of such amounts that the CAISO receives after reallocating cost responsibility for remaining Network Upgrades during the applicable annual reassessment shall be disbursed by the CAISO in the same manner in a subsequent reassessment, based on the date of collection, unless the applicable Network Upgrade is no longer needed, in which case such amounts will be disbursed pursuant to Section 7.6(c).

If a Network Upgrade for which the CAISO disburses funds as a contribution in aid of construction under this Section 7.6(b) is determined, in a subsequent reassessment, to be no longer needed, such funds will be promptly returned to the CAISO by the applicable Participating TO and re-disbursed by the CAISO pursuant to Section 7.6(c).

(c) Calculation and Disbursement of All Other Non-Refundable Security and Study Deposits

For each Linterconnection Ceustomer that withdrew its Linterconnection Request or terminated its Generator Linterconnection Aagreement during a withdrawal period, any non-refundable Linterconnection Setudy Deleposits, as well as any non-refundable Linterconnection Financial Security not disbursed pursuant to subsection (b) above, shall be applied to offset Regional Transmission Revenue Requirements, as recovered through the CAISO's Transmission Access Charge, and to offset Local Transmission Revenue Requirements. Any non-refundable Linterconnection Financial Security and Linterconnection Setudy Deleposits relating to withdrawals or terminations that occurred prior to January 1, 2013 that are collected by the CAISO during a withdrawal period, as defined in Section 7.6(a), will also be disbursed in accordance with this provision.

This offset shall be performed by first allocating these non-refundable linterconnection Study Deposit and Linterconnection Financial Security amounts to the following three categories in proportion to the Linterconnection Ceustomer's most recent estimated Current Ceost Responsibility, prior to withdrawal or termination, for Network Upgrades whose costs would be recovered through each of the following categories: (1) a Regional Transmission Revenue Requirement, (2) the Local Transmission Revenue Requirement of the Participating TO to which the interconnection customer had proposed to interconnect, and (3) the Local Transmission Revenue Requirement of any other Participating TO on whose system the interconnection customer was responsible for funding Network Upgrades recovered through a Local Transmission Revenue Requirement.

Each year, prior to the cutoff date for including annual regional TRBA adjustments in Regional Transmission Revenue Requirements, the CAISO will disburse to each Participating TO's Transmission Revenue Balancing Account: (a) a share of the total funds held or received by the CAISO from category (1) above in proportion to the ratio of each Participating TO's most recent Regional Transmission Revenue Requirement to the total of all Participating TOs' most received by the CAISO in categories (2) and (3) applicable to that Participating TO.

(d) Disbursement of Funds by CAISO; Participating TO Responsibility for Collection

The CAISO shall disburse, in accordance with the rules set forth in this Section 7.6, only those non-refundable Linterconnection Ffinancial Security and Setudy Deleposit amounts that it holds or has received. The applicable Participating TO shall have the exclusive obligation to administer the collection of any non-refundable financial security where the applicable Participating TO is a beneficiary. The applicable Participating TO has the responsibility to manage the financial security and to transmit to the CAISO the non-refundable amounts in cash or equivalent within 75 days of the CAISO's submission to the Participating TO of the financial security liquidation form. This deadline can be modified by mutual agreement of the CAISO and applicable Participating TO.

(e) The CAISO shall, upon receipt, deposit all non-refundable linterconnection Ffinancial Security and Interconnection Setudy Deleposit amounts in an interest-bearing account at a bank or financial institution designated by the CAISO. Any interest earned on such amounts, based on the actual rate of the account, shall be allocated and disbursed in the same manner as the principal, in accordance with the methodology set forth in this Section 7.6.

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### Section 8

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# 8.1 Scope of Phase II Interconnection Study

### 8.1.1 Purpose of the Phase II Interconnection Study

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. The Phase II Interconnection Study shall:

- update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests from the current Queue Cluster;
- (ii) identify final <u>GRNUs</u> and <u>IRNUs</u> needed in order to achieve Commercial Operation status for the Generating Facilities and provide final cost estimates;
- (iii) identify final LDNUs needed to interconnect those Generating Facilities selecting Full Capacity or Partial Capacity Deliverability Status and provide final cost estimates;
- (iv) identify final ADNUs for Interconnection Customers selecting Option (B), as provided below and provide revised cost estimates;
- (v) identify, for each Interconnection Request, the Participating TO's Interconnection Facilities for the final Point of Interconnection and provide a +/-20% cost estimate:
- (vi) coordinate in-service timing requirements based on operational studies in order to facilitate achievement of the Commercial Operation Dates of the Generating Facilities; and
- (vii) identify any potential control equipment for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity:

- (viii) update the Interconnection Customers Current Cost Responsibility, Maximum

  Cost Responsibility, and Maximum Cost Exposure, as applicable; and
- (ix) provide updated Precursor Network Upgrades needed to achieve the

  Commercial Operation status and Deliverability Status for the Generating
  Facilities.

The Phase II Interconnection Study report shall set forth the applicable cost estimates for RNUs, LDNUs, ADNUs Network Upgrades and Participating TOs Interconnection Facilities that shall be the basis for Interconnection Financial Security Postings under Section 11.3. Where the cost estimations applicable to the total of RNUs and LDNUs Maximum Cost Responsibility are is based upon the Phase I Interconnection Study (because the cost estimation for the subtotal of RNUs and LDNUs were lower and so establish maximum cost responsibility it is lower under Section 10.1), the Phase II Interconnection Study report shall recite this fact.

To the extent the CAISO determines that previously identified Conditionally Assigned Network Upgrades become Precursor Network Upgrades pursuant to Section 14.2.2, or are otherwise removed, the CAISO will reduce the Interconnection Customer's Maximum Cost Exposure, as applicable. To the extent the CAISO determines that a Conditionally Assigned Network Upgrade becomes an Assigned Network Upgrade, the CAISO will adjust the Interconnection Customer's Current Cost Responsibility and Maximum Cost Responsibility.

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# 8.3 Cost Responsibility for Reliability Network Upgrades

Cost responsibility for final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request shall be assigned to Interconnection Customers regardless of whether the Interconnection Customer has selected Option (A) or (B) or Energy Only Deliverability Status, as follows:

- (i) The cost responsibility for final short circuit related <a href="General">General</a> Reliability Network
  Upgrades shall be assigned to all Interconnection Requests in the Group Study
  pro rata on the basis of proportional to the short circuit duty contribution of each
  Generating Facility.
- (ii) The cost responsibility for all other final <u>General Reliability Network Upgrades</u> shall be assigned to all Interconnection Requests in that Group Study <u>pro rata enproportional to</u> the basis of the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.
- (iii) The Interconnection Customer's Current Cost Responsibility will include its allocated cost share for Interconnection Reliability Network Upgrades that are Assigned Network Upgrades. The CAISO will allocate assigned Interconnection

Reliability Network Upgrade costs proportional to the number of Interconnection Requests that have been assigned the Interconnection Reliability Network Upgrade in the current Queue Cluster.

- (iv) The Interconnection Customer's Maximum Cost Responsibility will include the full cost of Assigned Network Upgrades that are Interconnection Reliability Network Upgrades unless another Interconnection Customer in the same Queue makes its third Interconnection Financial Security posting for the same assigned Interconnection Reliability Network Upgrade, in which case the CAISO will reduce the Interconnection Customer's Maximum Cost Responsibility to its allocated share pursuant to subsection (iii).
- (v) The Maximum Cost Exposure will include the full cost of Interconnection
  Reliability Network Upgrades that are Assigned Network Upgrades and
  Conditionally Assigned Network Upgrades. The CAISO may reduce the
  Maximum Cost Exposure consistent with subsection (iv).

# 8.4 Cost Responsibility for **Local** Delivery Network Upgrades

The cost responsibility for Local Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of the Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status, regardless of whether the Interconnection Customer has selected Option (A) or (B), based on the flow impact of each such Generating Facility on each Local Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

#### 8.4.1 Cost Responsibility for Area Delivery Network Upgrades

The cost responsibility for Area Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to Interconnection Customers who have selected Option (B) Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on each Area Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The cost estimate Current Cost Responsibility provided in the Phase II Interconnection Study shall establish the basis for the second Interconnection Financial Security Posting for Interconnection Customers selecting Option (B).

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#### 8.9.2.2 Proceeding without a Power Purchase Agreement

Interconnection Customers only may attest that they are proceeding without a power purchase agreement in the allocation cycle immediately following receipt of their Phase II Interconnection Study (without having parked). Interconnection Customers that receive TP Deliverability in this group may park only that portion of their Interconnection

Request that does not receive TP Deliverability. Parked portions may receive TP Deliverability in subsequent allocation cycles from any group for which they qualify. Interconnection Customers that receive TP Deliverability allocations for less than requested may elect to reduce their capacity to the amount of TP Deliverability received following the allocation.

If an Interconnection Customer receives TP Deliverability on the basis that it is proceeding without a power purchase agreement, it must accept the TP Deliverability allocation and forego parking that capacity, or withdraw. If an Interconnection Customer receives TP Deliverability on the basis that it is proceeding without a power purchase agreement, it may not request suspension under its GIA, delay providing its notice to proceed as specified in its GIA, or modify its Commercial Operation Date beyond the earlier of (a) the date established in its Interconnection Request when it requests TP Deliverability or (b) seven (7) years from the date the CAISO received its Interconnection Request. Extensions due to Participating TO construction delays will extend these deadlines equally. Interconnection Customers that fail to proceed toward their Commercial Operation Date under these requirements and as specified in their GIA will be converted to Energy Only. Interconnection Customers that become Energy Only for this or any reason may not reduce their Maximum Cost Responsibility, Current Ceost Rresponsibility, or Interconnection Financial Security for any assigned Delivery Network Upgrades unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers.

This Section 8.9.2.2 does not apply to Interconnection Customers that attested to balance-sheet financing or otherwise receiving a commitment of project financing before November 27, 2018, or that do so pursuant to Section 8.9.3.1.

### 8.9.3 Retaining TP Deliverability Allocation

For Interconnection Customers in Queue Cluster 10 or later, once a Generating Facility is allocated TP Deliverability under Section 8.9.1, the Interconnection Customer annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

- (1) The Generating Facility is in good standing with respect to the criteria on which the allocation of TP Deliverability was based;
- (2) If the Generating Facility received TP Deliverability on the basis of having executed a power purchase agreement, it must have received regulatory approval of that agreement;
- (3) If the Generating Facility received TP Deliverability on the basis of negotiating or being shortlisted for a power purchase agreement, it must have executed the agreement by November 30 of the year it received TP Deliverability. It must then comply with criterion 8.9.3(2) the following year;
- (4) <u>If t</u>The Interconnection Customer <u>must have has</u> executed a GIA, <u>it and</u> must remain in good standing with regard to its GIA, such that neither the Participating

TO nor CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA that has not been cured and the Interconnection Customer has not commenced curative actions:

(5) The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension is required for reasons beyond the control of the Interconnection Customer or such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities

The Interconnection Customer will provide the required information in the form of an affidavit as described in the Business Practice Manual. Interconnection Customers that fail to meet these criteria will become Energy Only for that portion of the Generating Facility that has not retained TP Deliverability. An Interconnection Customer's failure to retain its TP Deliverability will not be considered a Breach of its GIA. Except as provided in Section 8.9.3.2, Interconnection Customers that become Energy Only for failure to retain their TP Deliverability Allocation may not reduce their Maximum Cost Responsibility, Current Ceost Responsibility, or Interconnection Financial Security for any assigned Delivery Network Upgrades unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers. To the extent TP Deliverability has been allocated, lost, or relinquished only for a portion of the Interconnection Customer's project, this section 8.9.3 will apply to that portion of the project only.

# 8.9.3.1 Retaining TP Deliverability Allocation for Pre-Cluster 10 Interconnection Customers

Interconnection Customers in Queue Cluster 9 or earlier subject to this Appendix DD that have been allocated TP Deliverability or that parked pursuant to Section 8.9.4 or 8.9.4.1, annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

- (1) The Generating Facility is in good standing with respect to the criteria on which the allocation of TP Deliverability was based;
- (2) If the Generating Facility received TP Deliverability on the basis of negotiating or being shortlisted for a power purchase agreement, it must have executed the agreement by the start of the next allocation cycle, or attest to balance-sheet financing or receipt of a commitment of project financing;
- (3) <u>If t</u>The Interconnection Customer <u>must havehas</u> executed a GIA, <u>it-and</u> must remain in good standing with regard to its GIA, such that neither the Participating TO nor CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA that has not been cured and the Interconnection Customer has not commenced curative actions;

(4) The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension is required for reasons beyond the control of the Interconnection Customer or such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities.

Interconnection Customers that have attested to balance-sheet financing or receipt of a commitment of project financing or do so pursuant to this Section are not subject to Section 8.9.2.2. Interconnection Customers that attest to balance-sheet financing pursuant to this Section 8.9.3.1 will be placed in TP Deliverability allocation group 8.9.2(3).

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# 8.9.5 Partial Allocations of Transmission Based Deliverability to Option (A) and Option (B) Generating Facilities

If a Generating Facility is allocated TP Deliverability in the current Interconnection Study Cycle in an amount less than the amount of Deliverability requested, then the Interconnection Customer must choose one of the following options:

- (i) Accept the allocated amount of TP Deliverability and reduce the MW generating capacity of the proposed Generating Facility such that the allocated amount of TP Deliverability will provide Full Capacity Deliverability Status to the reduced generating capacity;
- (ii) Accept the allocated amount of TP Deliverability and adjust the Deliverability status of the proposed Generating Facility to achieve Partial Capacity Deliverability corresponding to the allocated TP Deliverability;
- (iii) For Option (A) Generating Facilities, accept the allocated amount of TP Deliverability and seek additional TP Deliverability for the remainder of the requested Deliverability of the Interconnection Request in the next allocation cycle. In such instance, the Interconnection Customer shall execute a GIA for the entire Generating Facility having Partial Capacity Deliverability corresponding to the allocated amount of TP Deliverability. Following the next cycle of TP Deliverability allocation, the GIA shall be amended as needed to adjust its Deliverability status to reflect any additional allocation of TP Deliverability. At this time the Interconnection Customer may also adopt options (i) or (ii) above based on the final amount of TP Deliverability allocated to the Generating Facility. There will be no further opportunity for this Generating Facility to participate in any subsequent cycle of TP Deliverability allocation; or
- (iv) Decline the allocated amount of TP Deliverability and either withdraw the Interconnection Request or convert to Energy Only Deliverability Status. An

Interconnection Customer having an Option (A) Generating Facility that has not previously parked may decline the allocation of TP Deliverability and park until the next cycle of TP Deliverability allocation in the next Interconnection Study Cycle.

An Interconnection Customer that selects option (iii) or (iv) above may, at the time it selects the option, elect to reduce the generating capacity of its Generating Facility.

Interconnection Customers accepting a partial allocation of TP Deliverability may pursue additional deliverability through the Annual Full Capacity Deliverability Option under as described in Section 8.9.2.

# 8.9.6 Declining TP Deliverability Allocation

An Interconnection Customer having an Option (A) Generating Facility and allocated the entire amount of requested TP Deliverability may decline all or a portion of the TP Deliverability allocation and park the Generating Facility Request as described in Section 8.9.4(3). An Interconnection Customer that selects this option may, at the time it selects the option, elect to reduce the generating capacity of its Generating Facility.

# 8.9.7 [Intentionally Omitted]

### 8.9.8 Updates to Phase II Interconnection Study Results

Upon completion of the allocation of TP Deliverability in accordance with Section 8.9.2, the ISO will provide the allocation results to the Interconnection Customers for eligible Generating Facilities in the current Queue Cluster and eligible parked Generating Facilities. Each of these Interconnection Customers will then have seven (7) calendar days to inform the ISO of its decisions in accordance with Sections 8.9.4, 8.9.5, and 8.9.6. Following the ISO's receipt of this information from all affected Interconnection Customers, the ISO will provide updates where needed to the Phase II Interconnection Study reports for all Generating Facilities whose Network Upgrades have been affected.

# 8.9.9 Deliverability Transfers

Deliverability may not be assigned or otherwise transferred except as expressly provided by the CAISO Tariff. An Interconnection Customer may reallocate its Generating Facility's Deliverability among its own Generating Units or Resource IDs at the Generating Facility. The Generating Units must be located at the same Point of Interconnection and operate under the same GIA. The Generating Facility's aggregate output as evaluated in the Deliverability Assessment cannot increase as the result of any transfer, but may decrease based on the assignee's characteristics and capacity. The CAISO will inform the Interconnection Customer of each Generating Unit's Deliverability Status and associated capacity as the result of any transfer. The results will be based on the current Deliverability Assessment methodology.

An Interconnection Customer may request to reallocate its Deliverability among its

Generating Units pursuant to Section 6.7.2.2 of this GIDAP, Article 5.19 of the LGIA, and

Article 3.4.5 of the SGIA, as applicable. A repowering Interconnection Customer may

transfer Deliverability as part of the repowering process pursuant to Section 25.1.2 of the

CAISO Tariff. An Interconnection Customer expanding its capacity behind-the-meter

pursuant to Section 4.2.1.2 also may transfer Deliverability as part of that process, or subsequently under the other processes in this Section.

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