



California ISO

2021 Modification Assessment Cost Report

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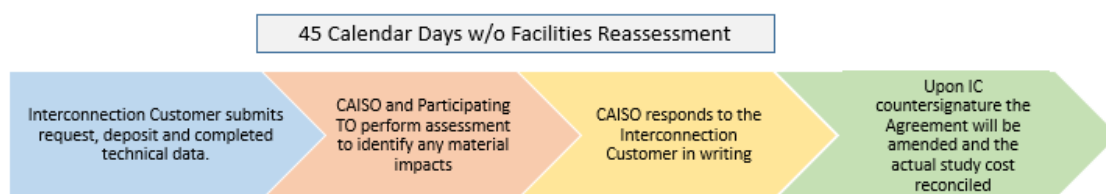
1. Executive Summary

1.1 Purpose and Scope

The ISO evaluates a variety of modification requests for Interconnection Customers' generator projects. In doing so, the ISO coordinates with the relevant Participating TO(s), Affected Participating TO(s) and Affected System Operator(s), if appropriate. To provide transparency regarding the cost of material modification assessments ("MMA"), the Tariff requires the ISO to publish cost data for the MMAs. This report contains a description of the number, types, duration, and costs of modification requests completed in 2021.

1.2 Background

The ISO generally uses the same process and criteria to review modification requests for all generation projects.¹ A high level-depiction of the modification process is below:



If a Facilities Reassessment is required, the modification assessment can take an additional 45 calendar days. The Facilities Reassessment is initiated after completion of the MMA and the determination that the modification request is not material.

Interconnection Customers are required to provide a \$10,000 deposit for the modification assessment, and after the modification assessment is complete, the ISO invoices for the actual costs incurred for the modification assessment. The invoices include an itemized account of expenses incurred, including those incurred by the ISO, the Participating TOs, and third parties at the direction of the ISO or Participating TO. Whenever the actual cost of performing the modification assessment exceeds the modification assessment deposit, the invoice directs the Interconnection Customer to pay the excess amount. However, it is far more common for the deposit to exceed the invoice,² in which case the Interconnection Customer is refunded the balance with interest.

¹ The MMAs discussed in this report are governed by ISO Tariff Appendix S, Section 1.3.4; Appendix T, Section 3.4.5; Appendix U, Section 4.4.3; Appendix Y, Section 6.9.2.2; or Appendix DD, Article 6.7.2.2 as applicable, and the BPM for Generator Management.

² Or the Interconnection Customer withdraws its modification request before most costs are incurred.

1.3 Report Summary

1.3.1 Types of Modifications

The Interconnection Customer must submit to the ISO, in writing, a request to modify their Project and any information provided in the Interconnection Request or Generator Interconnection Agreement. The variety, content, and scope of modification requests are as unique and complex as the Generating Facilities themselves, but for the purpose of this report, modification requests have been grouped into seven “buckets”:

- 1) Commercial Operation Date (“COD”) extensions and/or requests for project Phasing;
- 2) Technology changes: inverter, add batteries, transformer, and equipment changes;
- 3) Interconnection changes: generation tie route changes, Point of Interconnection changes, Point of Change of Ownership changes, and site location changes;
- 4) Technology and Interconnection Changes: Technology and interconnection changes as discussed above;
- 5) COD and Interconnection: COD and interconnection changes as discussed above;
- 6) COD and Technology: COD and technology changes as discussed above; and
- 7) Complex changes: multiple changes including COD, technology, and or interconnection as discussed above.

1.3.2 Time

The modification assessment commences when the ISO and Participating TO (1) deem the modification request (including all of the necessary technical documentation) valid and data complete, and (2) receive the Interconnection Customer’s modification assessment deposit. Per the Tariff, the ISO targets providing a written response to the Interconnection Customer within 45 calendar days of commencement. If the modification assessment cannot be completed within that period, the ISO notifies the Interconnection Customer, provides an estimated completion date, and explains why additional time is required.

If a facilities reassessment is required after the modification request has been determined to not be material, which can take up to an additional 45 calendar days. If the facilities reassessment cannot be completed within that period, the ISO notifies the Interconnection Customer, provides an estimated completion date, and explains why additional time is required.

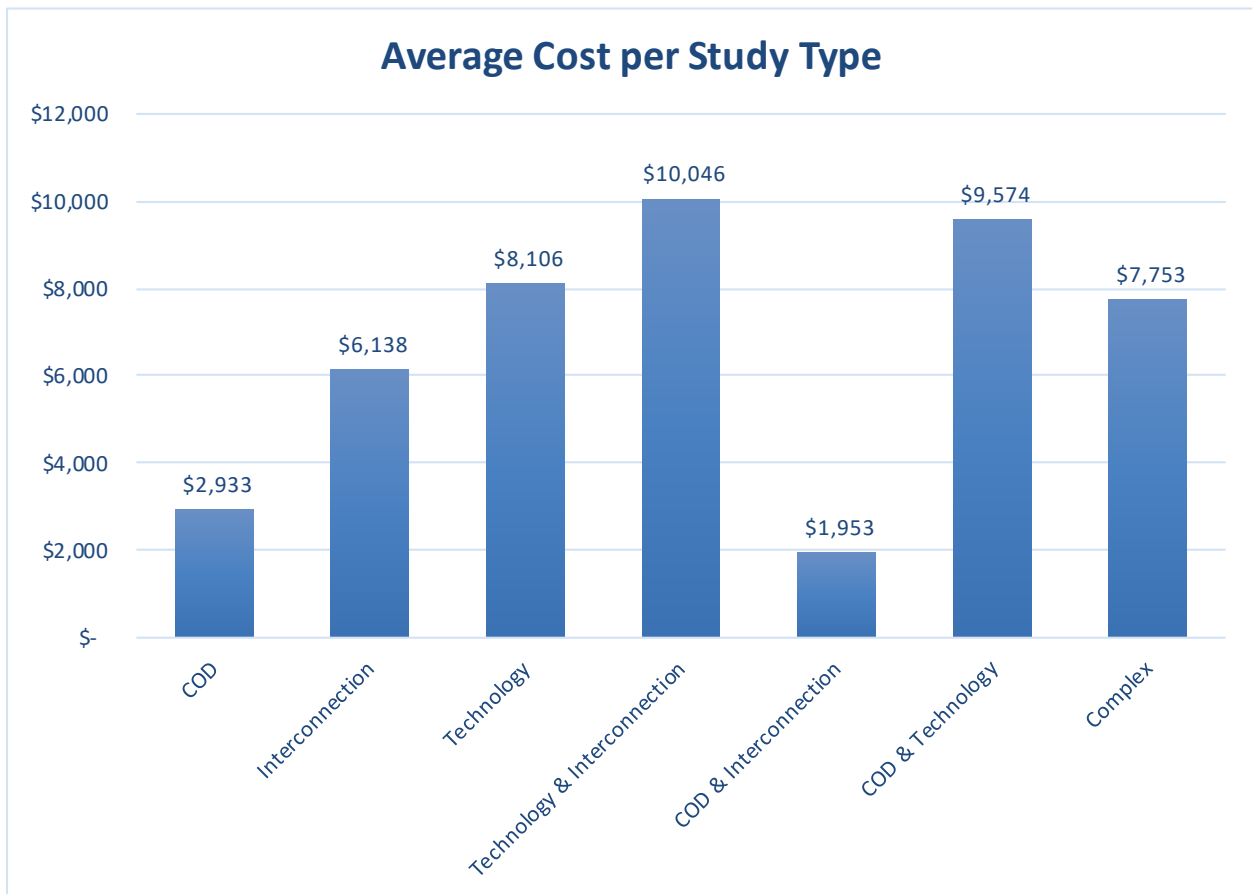
2. Report

2.1 MMA Costs

The ISO completed 84 MMAs in 2021.

The average cost for MMAs in 2021 was \$6,137.82. The highest-cost modification assessment was \$21,731.73. The lowest-cost modification assessment was \$1,005.65.³

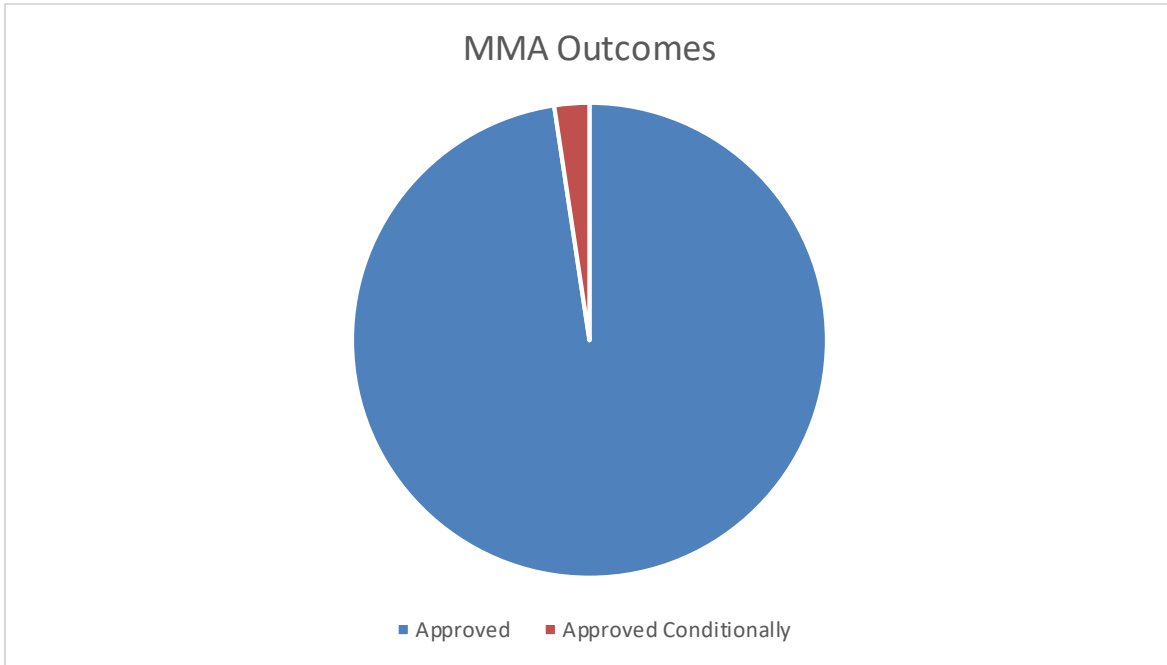
Of the 84 MMAs, fifteen (15) modifications were more than \$10,000, twenty-four (24) modifications were between \$5,000 and \$10,000, and forty-five (45) modifications were less than \$5,000.



³ The ISO tariff requires that “The Participating TO(s) shall invoice the ISO for any assessment work within seventy-five (75) calendar days of completion of the assessment.” These values include MMAs where the ISO received no invoice from the Participating TO.

2.2 MMA Outcomes

The outcome of a MMA will result in one of three categories – approved, approved with conditions, or denied. Of the 84 MMAs in 2021, eighty-two (82) were approved and two (2) were approved with conditions.



Conditional approvals are generally based on the following criteria:

- Execute the Generator Interconnection Agreement or an Amendment to the Generator Interconnection Agreement by a certain date.
- Continue funding upgrades required for other projects.

2.3 MMA Average Study Times

Of the 84 MMAs in 2021, the average time in the process varied depending upon the complexities of the request. The time starts on the date in which the last IR is submitted by the Interconnection Customer that is ultimately deemed valid and ends on the date in which the ISO sends the response letter to the Interconnection Customer.

Of the 84 modifications, ten (10) required a Facility Reassessment following the initial modification assessment. Of the ten (10) that required a Facility Reassessment, five (5) were completed in 90 days or less. The remaining five (5) of the 10 took greater than 90 days to complete. The longest MMA with a Facility Reassessment was 313 days. The shortest MMA with a Facility Reassessment was sixty-four (64) days.

Of the 74 modifications that did not require Facility Reassessments, the average days per study in 2021 was 113 days. The longest MMA took 332 days. The shortest MMA took five (5) days. Forty-one (41) took greater than 90 days to complete, nineteen (19) took less than 90 days and greater than 45 days, and fourteen (14) were completed in 45 days or less.

