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Decision 21-05-004 May 6, 2021

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of Southern California Edison Company (U338E) for Approval of Greenhouse Gas Cap-and-Trade Program Cost and Revenue Allocation.	Application 13-08-002
And Related Matters.	Application 13-08-003 Application 13-08-005 Application 13-08-007 Application 13-08-008

DECISION MODIFYING DECISION 19-04-016, ATTACHMENT A

Summary

This decision amends the weighted average cost of Greenhouse Gas (GHG) compliance instruments methodology to clarify that the direct GHG costs of a resource are appropriately recorded in the balancing account to which cost recovery of the underlying resource is approved. This decision shall take effect for each of the five applicable electric investor-owned utilities' 2020 Record Year Energy Resource Recovery Account compliance application or Energy Cost Adjustment Clause application. This consolidated proceeding is closed.

1. Background

Rulemaking (R.) 11-03-012 created a framework for addressing greenhouse gas (GHG)-related costs and allocated allowance proceeds generated by the State of California's Cap-and-Trade program for electric investor-owned utilities (IOUs). As part of the rulemaking, the Commission ordered Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Liberty Utilities (CalPeco Electric) LLC (Liberty CalPeco), and PacifiCorp d/b/a Pacific Power (PacifiCorp) to file applications[1] for approval of forecast GHG costs and allocated allowance proceeds[2] sufficient to calculate the GHG allocated allowance proceed return to customers for 2014.[3]

The Commission subsequently consolidated the five applications and reviewed them in two phases. In Phase 1, the Commission adopted Cap-and-Trade GHG cost and allocated allowance proceed forecasts, which the electric IOUs incorporated into their 2014 electricity rates.

In Phase 2, the Commission adopted standard procedures for electric utilities to file GHG allocated allowance proceeds and reconciliation requests, including the methodology for utilities to calculate the weighted average cost (WAC) of GHG compliance instruments (WAC methodology).[4] A perennial subject of interpretation, the Commission subsequently modified the WAC

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[1] Application (A.) 13-08-002, A.13-08-003, A.13-08-005, A.13-08-007, and A.13-08-008.

[2] These costs included administrative and customer outreach expenses.

[3] Decision (D.) 12-12-033.

[4] D.14-10-033.

methodology in D.14-10-055, then again in D.15-01-024, and most recently in D.19-04-016.

Since the Commission last modified the WAC methodology in D.19-04-016, the Public Advocates Office of the California Public Utilities Commission (Cal Advocates) objected to SCE's recording of direct GHG costs in any balancing account other than the Energy Resource Recovery Account (ERRA) balancing account[5] in SCE's 2020 Forecast application (A.19-06-002) and SCE's 2018 ERRA Compliance application (A.19-04-001) based on the current WAC methodology language in D.19-04-016 Attachment C, which refers to recording direct GHG costs in the "ERRA" or "ERRA account."

In SCE's 2020 ERRA forecast decision (D.20-01-022), the Commission found that the electric IOUs are not limited to recording direct GHG costs in the ERRA balancing account and that these costs are appropriately recorded in the balancing account to which cost recovery for the underlying resource is approved.[6] In the SCE 2018 ERRA compliance decision, the Commission ordered SCE to convene a working group to discuss modifications to the WAC methodology in D.19-04-016 in order to clarify the balancing account treatment of direct GHG costs.[7] SCE was ordered to submit a petition for modification (PFM) to D.19-04-016 within nine months of the effective date of D.20-05-004 with proposed language

[5] SCE recorded direct GHG costs for cost allocation mechanism-eligible resources in the New System Generation Balancing Account. (D.20-01-022 at 38-41.)

[6] D.20-01-022 at 40-41.

[7] D.20-05-004 at 67 (Ordering Paragraph (OP) 7).

modifying the WAC methodology to conform with the Commission's direction on direct GHG cost treatment in D.20-01-022.

A working group consisting of representatives from SCE, Cal Advocates, PG&E, SDG&E, Liberty CalPeco, and PacifiCorp met on September 28, 2020 and November 13, 2020 to discuss modifications to D.19-04-016 Attachment A. On January 22, 2020, SCE and Cal Advocates (the Joint Parties) filed this PFM of D.19-04-016 based on the working group's mutually agreed-upon edits to the WAC methodology. No parties filed replies or protests to the PFM. The record was deemed submitted on February 26, 2021.

2. The PFM Complies with Rule 16.4(d)[8]

Rule 16.4(d) requires petitioners to file and serve PFMs within one year of the effective date of a decision. If more than one year elapses before a petitioner files a PFM, the petitioner must explain why the PFM could not have been presented within one year of the effective date of the decision.

As discussed above, the interpretation of language in D.19-04-016 Attachment A was the subject of dispute between the Cal Advocates and SCE in the 2020 ERRA Forecast application and 2018 ERRA Compliance application proceedings. While the Joint Parties filed this PFM more than one year after the effective date of D.19-04-016, dated May 6, 2019; they timely filed this PFM in accordance with D.20-05-004 OP 7.[9] Accordingly, this petition is justified and in compliance with Rule 16.4(d).

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[8] All references to "Rule" or "Rules" in this decision refer to the Commission's Rules of Practice and Procedure.

[9] The deadline to file this PFM per D.20-05-004 was February 15, 2021.

3. The Commission Adopts an Updated WAC Methodology to Address Balancing Account Treatment of Direct GHG Costs

The Joint Utilities request the Commission adopt modifications to the WAC methodology to clarify that GHG costs for resources should be given the same balancing account treatment as other procurement-related expenses for the resources, including the costs of resources eligible for Cost Allocation Mechanism treatment and resources eligible for Power Charge Indifference Adjustment above-market cost treatment.[10] Specifically, the proposed revisions eliminate ambiguous references to "ERRA" or "ERRA account" in the WAC methodology and replace the language with references to each utility's "respective balancing account."[11] The proposed revisions also include a new template called the "GHG Balancing Account Table" which summarizes the direct GHG costs in an electric utilities' various balancing accounts.[12] Other than the minor modifications proposed in the PFM, the electric utilities generally found the current WAC methodology "has successfully addressed accounting issues, including the use of estimates in accounting accrual and the demonstration of the WAC calculations within the ERRA review proceedings."[13]

We find the requested modifications resolve the balancing account treatment of direct GHG costs in accordance with the Commission's direction in D.20-01-022. Accordingly, we adopt the proposed edits in the PFM, along with

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[10] PFM at 5.

[11] *Id*.

[12] PFM, Attach. A at 1-15 to 1-16.

[13] *Id*. at 4.

additional clarifying language, and replace the WAC methodology in D.19-04-016 Attachment A[14] in its entirety. The additional clarifying language is included as a new section 10 of the WAC Methodology. This section identifies the new "GHG Balancing Account Table" as Template C-2. It includes the Joint Parties' proposed language describing the GHG Accounting Table as well as the illustrative GHG Balancing Account Table proposed by the Joint Parties.[15] We find the additional clarification created by dedicating a separate section to the GHG Balancing Account Table prudent given the longstanding history of dispute over ambiguities in the WAC methodology.

While we recognize some electric utilities already account for direct GHG costs in the balancing account for which the underlying resource is approved, we direct PG&E, SCE, SDG&E, PacifiCorp, and Liberty CalPeco to begin using the modified WAC methodology beginning in the 2020 Record Year ECAC or ERRA compliance applications. For ECAC and ERRA applications filed prior to the adoption of this modified WAC methodology, Decision 19-04-016 remains in effect.

4. Mailing and Comments on Decision

The proposed decision in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under

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[14] All modifications to the WAC methodology are an update to Attachment C in D.14-10-033, regardless of the Attachment in which the modification occurs.

[15] PFM, Attach. A at 1-15 to 1-16.

Rule 14.3. SCE filed comments on April 21, 2021. No party filed reply comments. SCE's comments on Attachment A are incorporated in this decision.

5. Assignment of Proceeding

Martha Guzman Aceves is the assigned Commissioner and Zita Kline is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. The current WAC methodology was subject to ongoing dispute between SCE and Cal Advocates in SCE's 2020 ERRA Forecast application (A.19-06-002) and SCE's 2018 ERRA Compliance application (A.19-04-001).
2. The Joint Parties filed this PFM to D.19-04-016 over one year after D.19-04-016 pursuant to the order in D.20-05-004 OP 7 to address the balancing account treatment of direct GHG costs.
3. SCE, SDG&E, PG&E, PacifiCorp, Liberty CalPeco, and Cal Advocates worked collaboratively to develop the modified WAC methodology proposed in the PFM.
4. Direct GHG costs may be recorded in balancing accounts associated with other costs related to the same resource.
5. The utilities are not required to record all direct GHG costs exclusively in the ERRA and ECAC balancing accounts.
6. The revised WAC methodology clarifies the utilities' balancing account treatment for direct GHG costs.

Conclusions of Law

1. The Commission should find that this PFM was justified even though it was filed more than one year since the issuance of D.19-04-016.

2. Upon notice and opportunity to be heard, the Commission may alter or amend a previous decision or order.

3. A decision altering or amending the previous decision or order should have the same effect as the original decision or order.

4. The WAC methodology should be replaced in its entirety by the WAC methodology in Attachment A.

5. PG&E, SCE, SDG&E, PacifiCorp and Liberty CalPeco should use the modified WAC methodology in their respective ERRA compliance and ECAC applications starting in 2021 for the 2020 Record Year.

6. For ECAC and ERRA applications filed prior to the adoption of this modified WAC methodology, Decision 19-04-016 should remain in effect.

7. A.13-08-002, A.13-08-003, A.13-08-005, A.13-08-007 and A.13-08-008 should be closed.

O R D E R

IT IS ORDERED that:

1. The weighted average cost of greenhouse gas compliance instruments methodology, as stated in Decision 19-04-016 Attachment A, is replaced in its entirety as shown in Attachment A of this decision.

2. Pacific Gas and Electric Company; Southern California Edison Company; San Diego Gas & Electric Company; PacifiCorp d/b/a Pacific Power; and Liberty Utilities (CalPeco Electric) LLC shall begin using the modified weighted average cost (WAC) of greenhouse gas compliance instruments methodology beginning in 2021 for the 2020 Record Year Energy Cost Adjustment Clause (ECAC) or Energy Resource Recovery Account (ERRA) compliance applications. For ECAC

and ERRA applications filed prior to the adoption of this modified WAC methodology, Decision 19-04-016 remains in effect.

3. Applications (A.) 13-08-002, A.13-08-003, A.13-08-005, A.13-08-007, and A.13-08-008 are closed.

This order is effective today.

Dated May 6, 2021, at San Francisco, California.

MARYBEL BATJER
President
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
DARCIE HOUCK
Commissioners

Attachment A

DECISION 14-10-033 REVISED ATTACHMENT C

Calculation of Weighted Average Cost of Greenhouse Gas Compliance Instruments

1. PURPOSE

The purpose of Attachment C is to set forth the methodology that the utilities, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas and Electric Company (SDG&E), PacifiCorp d/b/a Pacific Power and Liberty Utilities (CalPeco Electric) LLC, shall use in their respective Energy Cost Adjustment Clause (ECAC) and Energy Resource Recovery Account (ERRA) compliance proceedings for calculating the Weighted Average Cost (WAC) of Greenhouse Gas (GHG) compliance instruments for the purpose of allowing for regulatory review of each utility's WAC and providing for full cost recovery of the GHG compliance instruments in ERRA compliance and ECAC proceedings, consistent with Pub. Util. Code § 454.5(a) et seq. The WAC calculation will ensure that ratepayer GHG charges are equal to utility GHG compliance instrument procurement costs. This attachment also sets forth the GHG accounting methodology to be used in deriving emissions costs recorded in the respective balancing accounts. Direct GHG costs are recorded to the established cost recovery mechanism for the emitting resource, unless otherwise ordered by the Commission. To the extent the Commission authorizes new cost recovery mechanisms for eligible fuel and purchased power resources, those decisions will determine the appropriate balancing account. Examples of balancing accounts used to record GHG costs include the ERRA Balancing Account (ERRABA), the Portfolio Allocation Balancing Account (PABA), and the Local Generation Balancing Account (LGBA).

This Attachment C supersedes entirely the version of Attachment C contained in Decision (D.) 14-10-033, as corrected by D.14-10-055, D.15-01-024, and D.19-04-016, by clarifying numerous terms, concepts and procedures relevant to the WAC calculation for GHG compliance instruments. It makes more specific the accounting treatment that utilities shall utilize in calculating the WAC and promotes uniformity in how utilities account for and report their respective WAC accounting.

Further, to better align the regulatory reporting and review of recorded, actual GHG costs with well-established ERRA processes and applications dealing separately (and annually) with forecasted and recorded procurement-related costs, inclusive of the costs of GHG compliance instruments, and to eliminate unnecessary duplication and redundancy in these ERRA processes and applications, this Attachment C modifies D.14-10-033 and specifies that the reporting and review of actual, recorded GHG costs, and the demonstration of compliance with this Attachment C and the WAC methodology, occurs in the PG&E, SCE and SDG&E's ERRA compliance proceedings and not in their ERRA forecast proceedings, beginning as early as 2021 for Record Year 2020. In the interim, for ECAC and ERRA Compliance applications filed prior to the adoption of this modified WAC methodology, D.19-04-016 remains in effect.

2. GLOSSARY

- GAAP – Generally Accepted Accounting Principles.
- GHG Compliance Instrument Inventory (Inventory) – An accounting measurement that represents the volume or corresponding balance of compliance instruments purchased and delivered for a given compliance period that have not otherwise been sold or transferred to an entity or surrendered to the California Air Resources Board (ARB).
- Direct Monthly Emissions – The utility's estimated or verified monthly emissions using the best available data for which the utility has a compliance obligation to ARB or to a tolling partner.
- Eligible Compliance Instruments – For the purposes of calculating the WAC price, all delivered allowances with vintages within or before the compliance period of the GHG emissions obligation and all delivered ARB Offsets.
- Surrender – The act of compliance instrument retirement by ARB to meet the utility's compliance obligation (usually occurs in November).
- Transfer – The act of moving compliance instruments from a utility's Holding Account into a tolling partner's Holding Account based on contractual obligations to

provide compliance instruments at zero cost to the tolling partner.

- Holding Account – The account which holds the utility compliance instruments as defined in the Cap-and-Trade regulation.
- Compliance Account – The account which holds compliance instruments that the utility has committed for retirement as defined in the Cap-and-Trade regulation.

3. GHG ACCOUNTING METHODOLOGY OVERVIEW

Cap-and-Trade compliance instruments are retired annually up to two years and 10 months after the compliance year ends. A utility's recorded direct costs include two variables: emissions and costs of compliance instruments. Recorded year direct GHG costs represent the accrued costs for utility-owned generation, imports, tolls and other contracts for which the utility has responsibility for Cap-and-Trade costs based on the best available data at the time of each accounting period's month-end close as further discussed in Sections 6 and 7.

Each month, a utility records its GHG costs to its respective balancing account based on the accrual method of accounting. Physical compliance obligation costs are calculated as the WAC price of Eligible Compliance Instruments held in Inventory at the end of a month multiplied by the quantity of emissions generated in that month. Financially settled tolling agreements for which a utility records a direct GHG cost should be based on actual contract settlement, not on the WAC price.[1] The accrued costs will be trued-up in subsequent months as described in Section 7. In addition, in the month that compliance instruments are surrendered or transferred to a tolling partner, the accrual is trued-up so that costs recorded to the balancing account reflect the actual final cost of compliance instruments surrendered or transferred to a tolling partner. The recorded direct costs for the year are the sum of the monthly GHG expense entries for the year.

Under California's Cap-and-Trade program, a covered entity must surrender one compliance instrument (an allowance or an offset) for each metric ton of GHG emissions. Allowances are designated with a vintage year. An entity may bank allowances from previous vintage years, but not borrow from future vintage years, to meet a compliance obligation. For example, if a utility holds a vintage year 2013 allowance in its Inventory, it can surrender the allowance to meet its 2013 obligation, or bank the allowance to surrender in future years. The use of offsets to meet a compliance obligation, however, is not restricted by vintage year.[2]

4. PURCHASES OF COMPLIANCE INSTRUMENTS

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[1] The calculations for financially settled transactions occur outside of the WAC calculation. Please see template D-2 lines 7 and 17.

[2] ARB. Regulatory Guidance Document, Chapter 3. April 2013. http://www.arb.ca.gov/cc/capandtrade/guidance/20130419%20Guidance%20Document%20Ch%203 %20posting.pdf.

When a utility purchases or otherwise receives compliance instruments, it records:

- Transaction date;
- Transaction type (purchase);
- Vintage (if applicable);
- Quantity of compliance instruments for transaction;
- Transaction price: for purchases, cost per compliance instrument, including transactions fees, if applicable;
- Total cost of compliance instruments for this transaction calculated as the quantity multiplied by the cost;
- The new Inventory balance in dollars as modified by the new transaction;
- The new compliance instrument quantities in the Inventory as modified by the new transaction; and
- The new WAC price derived from the new Inventory balance in dollars divided by the compliance quantity of Eligible Compliance Instruments.

Other Inventory Costs - Any other subsequent fees or premiums paid to third-parties relating to the purchase of compliance instruments not included in the initial transaction price should be recorded as a cost in a utilities' compliance inventory. These costs should be trued-up consistent with the methodology described in section 7.2 (True-Ups of Prior Recorded Direct GHG $\text{Costs}_{\text{month}}$), including true-ups to allocate a proportional share of these costs to any compliance instrument transfers that may have occurred after the original transaction.)

In the event of an unintentional omission or data entry error, the correct amounts shall be recorded in the current month regardless of original transaction date and trued-up consistent with the methodology described in section 7.2 (True-Ups of Prior Recorded Direct GHG Costs$_{month}$).

5. REMOVAL OF COMPLIANCE INSTRUMENTS

When a utility sells, Transfers, Surrenders, or otherwise removes compliance instruments from its Inventory, it records:

- Transaction date;
- Transaction Type (sale, Transfer, Surrender, etc.);
- Vintage (if applicable);
- Quantity of compliance instruments for transaction;
- Transaction Price: For sales, Transfers and Surrenders, the Transaction Price is the current month's WAC price;
- Total Cost removed from the Inventory is calculated as quantity of compliance instruments for the transaction multiplied by the Transaction Price.
- The new WAC Price;
- Inventory balance in dollars as modified by the new transaction;
- The new compliance instrument quantities in the Inventory as modified by the new transaction; and
- The new WAC price derived from the new Inventory balance in dollars divided by the compliance quantities of that compliance period to date.

In the event of an unintentional omission or data entry error, the correct amounts shall be recorded in the current month regardless of original transaction date and trued up consistent with the methodology described in section 7.2 (True-Ups of Prior Recorded Direct GHG Costs$_{month}$).

In the event of an offset invalidation by ARB or another governing body, the invalidated volume will be removed from Inventory.[3]

6. CALCULATION OF THE WAC PRICE OF COMPLIANCE INSTRUMENTS

When a utility calculates the WAC price of compliance instruments, it shall include all Eligible Compliance Instruments for the applicable compliance period. Specifically, the calculation shall include all allowances with a vintage year within or before the compliance period and all ARB Offsets. For example, 2015 monthly WAC Prices are calculated based on eligible Inventory of allowances with vintage years 2013 through 2017 and all ARB Offsets, which comprise the Eligible Compliance Instruments. Allowances with vintages 2018 or later are not eligible for 2015 monthly WAC calculations since they belong to later compliance periods.

When a utility purchases compliance instruments, it records them in Inventory at the purchase price. When a utility procures additional compliance instruments, its Inventory increases and its WAC price may change. The cost of a utilities' Inventory also increases when it pays fees or premiums related to its compliance instruments. At any point in time, the WAC price is calculated as the total cost, inclusive of fees and premiums, of Eligible Compliance Instruments in

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[3] The invalidated volume will be expensed to ERRA or ECAC in the month of the invalidation at the current WAC, and is subject to ERRA or ECAC compliance review. In the event that insurance was purchased for the invalidated volume, the proceeds will be recorded to ERRA or ECAC utilizing the accrual basis of accounting.

Inventory, divided by the total quantity of Eligible Compliance Instruments in Inventory.

Note that as a new compliance period begins, true-ups, as described in detail in Section 7, from a given compliance period may utilize a WAC price that includes compliance instruments from a later compliance period. This is due to the timing of WAC price calculation compared to WAC price utilization. WAC price calculations, by definition, only include Eligible Compliance Instruments while being calculated. However, WAC price utilization for true-ups, Surrenders and Tolling Transfers that take place after their originating compliance period will necessarily use a WAC price that contains compliance instruments from any later compliance periods. For example, 2017 volumes that are surrendered in November 2018 would necessarily utilize the November 2018 WAC price whose calculation includes compliance instruments from the third compliance period (2018-2020).

For purposes of the WAC price calculation, when compliance instruments are sold, Transferred or Surrendered, they are taken out of Inventory at the WAC price in effect when they are removed from Inventory. These transactions do not change the WAC price of the remaining compliance instruments held in the Inventory. If the compliance instruments, inclusive of any applicable transaction fees and premiums, are sold at a higher (lower) price than the WAC price, the utility will record, in its respective balancing account, a gain (loss) on the sale. For WAC calculation purposes, compliance instruments remain as Inventory (current or noncurrent) until Surrendered, Transferred or sold.

7. METHODOLOGY FOR CALCULATING DIRECT GHG COSTS, INCLUDING TRUE-UPS, AND RECORDING COSTS INTO BALANCING ACCOUNTS

As discussed in Section 3, each month a utility records its GHG costs to its respective balancing account based on the accrual method of accounting using the best available emissions quantities and WAC price at the time the emissions costs are recorded. The accrual amount will continue to be trued-up in subsequent months as new or additional information becomes available for emission quantities and for WAC price changes. The following formula details the two components of GHG costs comprising a utilities' total monthly recorded direct GHG costs:

$$\textit{Recorded Direct GHG Costs}_{\text{month}} =$$

$$\textit{Direct GHG Costs}_{\text{month}} + \textit{True - Ups of Prior Recorded Direct GHG Costs}_{\text{month}}$$

7.1 Direct GHG Costs$_{month}$

After purchases, including applicable transaction fees and premiums, and sales have been reflected in the Inventory and the WAC price for a given month, the utility will calculate direct GHG costs for the month as follows:

$$\textit{Direct GHG Costs}_{\text{month}} = \textit{WAC Price}_{\text{month}} \times \textit{Direct Emissions Quantity}_{\text{month}}$$

Where:

"WAC Price" is defined in Section 6.

"Direct Emissions Quantity" is the direct emissions for the entire month calculated in accordance with ARB standards, regardless of whether compliance instruments have been Surrendered for these emissions. The emissions quantity is updated on at least a quarterly basis based on best available information.

Emissions from financially settled tolling agreements should not be included in Direct Emissions Quantity for purposes of this calculation.

7.2 True-Ups of Prior Recorded Direct GHG Costs$_{month}$

True-ups of prior recorded direct GHG costs are necessary to update previously recorded emissions quantities as updated quantities become known and to reflect WAC price changes. These updates will continue until the compliance instruments for those emissions quantities are Surrendered and removed from the Inventory. These true-ups also ensure that the cost of the compliance instruments Surrendered and removed from Inventory are properly recorded in the respective balancing accounts. As noted above, true-ups of prior recorded direct GHG costs include updating emission quantities (updating previously recorded quantities for subsequent volumetric updates at the current WAC price) and WAC price true-ups (updating all previously recorded Direct Monthly Emissions quantities that have Eligible Compliance Instruments remaining in Inventory to the current WAC price). Following is an example illustrating these true-ups.

Assume a utility has monthly direct GHG emissions volumes as shown in the following table in row (a). For the month of January and February, the direct GHG costs shown in row (c) of $720 and $600, respectively, are derived by multiplying the emission volumes in row (a) by the WAC price of Inventory ("WAC") in row (b). In March, the WAC increased to $12.25 from February's WAC of $12.00 to reflect new purchases of compliance instruments during the month. As a result, direct GHG costs incurred during March, shown in row (c), equal $551.25 (45MT * $12.25). Also, assume in March that January volumes of 60MTs were updated to 70MTs. As a result, a true-up of prior recorded direct GHG costs for $122.50 is recorded, shown in row (d), which reflects 10MT (70MT-60MT) of additional emission volumes at the current WAC of $12.25. An additional true-up of prior recorded direct GHG costs for $27.50, shown in row (e), is also necessary in March because of the change in the WAC, which requires revaluing all prior recorded compliance instruments still remaining in Inventory from the prior WAC of $12.00 in February to March's WAC of $12.25. True-ups of prior recorded direct GHG costs in March total $150, shown in row (f). In April, direct GHG costs of $625, shown in row (c), are incurred. Since the WAC increased to $12.50 in April from March's WAC of $12.25, shown in row (b), a true-up of prior recorded direct GHG costs for $41.25, shown in row (e), is necessary to revalue all of the prior recorded compliance instruments remaining in Inventory for the increase in the WAC price. Finally, the total direct GHG costs, shown in row (c), plus total true-ups of prior recorded direct GHG costs for volume and WAC price changes, shown in row (f), are recorded in the respective balancing accounts, shown in row (g).

Month	January	February	March	April
Direct GHG Costs				
(a) **Direct Emissions Quantity$_{\textbf{month}}$** in Metric Tons (MT)	60	50	45	50
(b) **WAC Price$_{\textbf{month}}$**($/MT)	$12.00	$12.00	$12.25	$12.50
(c) = (a) * (b) **Direct GHG Costs$_{\textbf{month}}$** ($)	$720.00	$600.00	$551.25	$625.00
True-Ups of Prior Recorded Direct GHG Costs				
(d) January emissions of 60 MT updated to 70 MT in March at the current month WAC price ($)	N/A	N/A	10MT * $12.25 = $122.50	N/A

(e) = (Prior months' Direct Monthly Emissions quantities that have Eligible Compliance Instruments still in Inventory[4]) * (Current month WAC Price – Prior month's WAC Price) Note: WAC Price true-ups to update all previously recorded Eligible Compliance Instruments still in Inventory to the current WAC price ($)	N/A	((January MT) 60 – 0 MT Surrendered) * ($12.00-$12.00) = $0 $0.00	((January MT) 60 + (February MT) 50 - 0 MT Surrendered) * ($12.00-$12.25) =$27.50 $27.50	((January MT) 70 + (February MT) 50 + (March MT) 45 - 0 MT Surrendered) * ($12.25-$12.50) = $41.25 $41.25
(f)= (d)+ (e) **True-Ups of Prior Recorded Direct GHG Costs$_{month}$** ($)	N/A	$0.00	$150.00	$41.25
(g)= (c)+ (f) **Recorded Direct GHG Costs$_{month}$** (as recorded in the respective balancing account) ($)	$720.00	$600.00	$701.25	$666.25

Note that this example is illustrative and a utility may combine or use different combinations of these steps in arriving at the same total direct GHG

[4] Note that prior month quantities still in inventory means that the calculation needs to be reduced by all previously Surrendered volumes.

costs recorded in the respective balancing accounts. At a minimum, and as discussed below in Section 11, each utility will submit a spreadsheet that fills out Template C-1 and C-2 in their respective ERRA compliance or ECAC applications.

8. TEMPLATE C-1: DEMONSTRATION OF WAC CALCULATIONS

When a utility files its GHG showing within the ERRA Compliance or ECAC Application, it shall use Template C-1 to show its WAC calculations. Each utility will use Template C-1, below, to develop a calculation worksheet for each applicable compliance period. The application should also show a calculation of direct costs based on the WAC price formula in Section 6 above and should show monthly true-ups as described in Section 7 above. GHG emissions from financially settled tolling agreements should NOT be included in this calculation. In no event shall the WAC and recorded calculations cause the utility to incur stranded costs associated with its procurement of instruments that the utility must obtain pursuant to legal or regulatory requirements.

If the Total Quantity in the Inventory at the end of a month is equal to zero, the utility shall use the most recent ARB allowance auction clearing price instead of the WAC price to calculate that month's emissions cost. The utility will record this number in place of the "End of Month WAC" to calculate that month's costs.

Template C-1: Reporting Template to Calculate Weighted Average Cost of Compliance Instruments and Direct GHG Costs

Month	Transaction/Activity Details							Inventory Emissions and $		WAC Pricing ($/MT)	Direct GHG Costs		True-Ups	Monthly BA Entry
Month	Transaction Date	Transaction Type	Quantity Pur/(Sales) (MT)	Purchase Price ($/MT)	Sales Price ($/MT)	Total Cost ($)	Total Sales ($)	Inventory Balance ($)	Total Qty in Inventory (MT)	WAC ($/MT)	Direct Monthly Emissions (MT)	WAC x Direct Emissions Qty ($)	True-Up Value +/- ($)	Monthly Balancing Account Entries ($)

9. FINANCIALLY SETTLED TOLLING AGREEMENTS

For tolling agreements with financial settlements, the following alternative calculation may be used:

Direct Cost = Settlement Price x Emissions Quantity

Where:

"Settlement Price" is the unit price at which the utility will financially compensate its tolling counterparty for GHG (usually the ARB Auction Clearing Price); and

"Emissions Quantity" is the emissions obligation for the entire month calculated in accordance with the tolling agreement.

The Inventory table and the resulting WAC calculations are confidential.

10. TEMPLATE C-2: THE GHG BALANCING ACCOUNT TABLE

The utilities shall provide a summary of direct GHG costs in each balancing account by completing the GHG Balancing Account Table in Template C-2.

Template C-2: The GHG Balancing Account Table

DIRECT GHG COSTS IN RECORD YEAR (in millions)

GHG Cost Category	**Account 1 ($)**	**Account 2 ($)**	**Account 3 ($)**	**Total ($)**
Utility-Owned Generation (UOG)				
Imported (out-of-state) UOG				
Tolling Contracts				
Total				

Template C-2 will show the total direct GHG costs recorded to each balancing account during the recorded year (which are to be reviewed in the ERRA compliance or ECAC proceedings), and sum to a total that matches the annual direct GHG costs as calculated by the WAC calculation described within this Attachment C. An illustrative example of Template C-2 appears here:

Example Template C-2: The GHG Balancing Account Table

DIRECT GHG COSTS 2019 (in millions)

GHG Cost Category	**ERRABA**	**PABA**	**LGBA**	**Total**
UOG	$0	$30	$0	$30
Imported (out-of-state) UOG	$0	$18	$0	$18
Tolling Contracts	$0	$2	$10	$12
Total	$0	$50	$10	$60

11. REGULATORY REVIEW OF WAC METHODOLOGY

Each utility shall demonstrate in its annual ERRA compliance or ECAC application that it followed this Attachment C for calculating its total direct GHG costs. The WAC table (Template C-1) above shows the total GHG costs charged to the respective balancing accounts. This review shall not be part of ERRA forecast proceedings.

A utility's demonstration of compliance with this Attachment C is satisfied by submission of the utility's WAC table (Template C-1) for the record year within its annual ERRA compliance or ECAC filing, along with testimony, as necessary, reporting on the utility's compliance instrument transactions executed within the record year, free allowances received, sold and associated revenues for the record year, and the emissions for the record year.

Also, utilities are required to provide a portion of Attachment D and Template C-2 in their ERRA compliance or ECAC application to demonstrate compliance with this Attachment C. The modified portions of Attachment D are as follows:

- Template D-2: Annual GHG Emissions and Associated Costs Recorded columns for the Record Year and Prior Year; Lines 1-8 and 15-17 only.

In sum, a utility's annual demonstration of compliance with the WAC methodology set forth in this Attachment is met by providing: 1) a completed Template C-1, 2) a completed Template C-2, and 3) portions of Template D-2, consistent with the methodology provided in this Attachment C.

(END OF ATTACHMENT A)