



## Regulation for the Mandatory Reporting of Greenhouse Gas Emissions GHG Reporting & Verification for 2019 Data *Electric Power Entities*



Wade McCartney & Abajh Singh  
March 10, 2020

## Overview

## Outline

- Overview
- Updates to MRR
- General Reporting and Verification Information
- Updates to Guidance, Cal e-GGRT & Workbook 1 Updates
- EPE Data Quality Assurance
- Questions



## 2018 EPE Data Reporting Recap

- 142 Electric Power Entity (EPE) reports submitted
- 88 verifications, 100% site visits
  - 100% received positive or qualified positive emissions verification statements
  - CARB conducted 13 verification audits (9 included site visits)
- 2018 summary data posted for all reports:

<https://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/2018-ghg-emissions-2019-11-04.xlsx>

## Reporting & Verification Schedule 2020

<b>June 1:</b>	<b>EPE &amp; Retail Sales Reporting Deadline §95103(e)</b>
<b>July 16:</b>	<b>REC Retirement Deadline for Eligible RPS Adjustments</b> EPEs must certify RECs as retired in the workbook 45 days after the reporting deadline per this date §95111(g), so verifiers may need to unlock report
<b>July 27:</b>	Latest 14-day deadline for notification of possible adverse verification statement (CARB recommends much earlier notification)
<b>August 10:</b>	<b>Final verification statements and reports due §95103(f)</b>

<https://ww2.arb.ca.gov/mrr-key-dates>



## Verification Overview & Best Practices

- Verifiers keep a detailed sampling plan §95131(b)(7)
  - Prepare sampling plan in advance to guide site visit
  - Plan to allocate time for reviewing documents on-site
    - Pay special attention to documents that cannot be provided off-site; ensure that your review is well-documented
- Document cross-checks, raw data sampling and query review, and your own calculations §95131(b)(6),(8)
  - Multi-pronged approach to mitigate risk of misstatement often works best
- 2018 MRR requires all issues communicated by CARB to be included in the issues log §95131(b)(11), as well as all modifications to the report made after the initial certification



## 2018 Reporting and Verification Issues

- Three reports contained blank values at the EPE Subpart level
  - Verifier failed to identify an error in the EDR because they only reviewed Workbook 1
    - ALWAYS review the emissions data report carefully and ask questions if unclear
- Outdated/Incomplete GHG Inventory Program documents
  - Over the last few years, several EPEs have had outdated inventory programs that have led to delays in resolving reporting issues
  - See new field in Reporter Info tab, Workbook 1
- Use 2018 MRR. There are pertinent changes from year-to-year that may affect your reporting requirements
- Incorrect selection of 'EIM, Tagged, or Metered' field in Spec Imports tab
  - Select the field that represents the source of the data
    - Lesser-of does not change the categorization, and EIM imports should always be reported as EIM
- Overall verification documentation was good; however there were numerous detailed errors, inconsistencies, & ambiguity



## Enforcement Summary

- Issues that could lead to enforcement include:
  - Incorrect data submitted
  - Errors leading to a material misstatement (includes errors present at the reporting or the verification deadline)
  - Failure to fix correctable errors
  - Late reports or failure to report
  - Late verification or no verification
- CARB has completed enforcement actions related to reporting, and continues enforcement activities
- As completed, case settlements are posted here:  
<http://www.arb.ca.gov/enf/casesett/casesett.htm>



# Updates to MRR



9

## 2018 MRR

- 2018 MRR became effective on April 1, 2019
- All EPE provisions in 2018 MRR are effective for reporting CY2019 emissions by June 1, 2020
- MRR regulation page: <https://ww2.arb.ca.gov/mrr-regulation>
  - 2018 MRR: <https://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-2018-unofficial-2019-4-3.pdf>
- Updates to Highlight
  - Updated EIM Outstanding Emissions Calculation
  - EIM Purchaser Reporting Requirements
  - Split Year Reporting of EIM Imports for CY2019
  - Annual Retail Sales & EIM Outstanding Emissions
  - Cessation



10

## EIM Purchaser Reporting Requirements

- EIM Participating Resource Scheduling Coordinators report deemed deliveries through EIM as imports to California
- To account for full GHG emissions experienced by the atmosphere from EIM imports, CARB calculates EIM Outstanding Emissions
  - EIM Outstanding Emissions = EIM Import MWh x Unspecified EF, less reported EIM emissions from both specified and unspecified EIM imports
- For imports before April 1, 2019, CARB calculated EIM Outstanding Emissions and then retired allowances equal to EIM Outstanding Emissions
- Beginning with April 1, 2019 imports, CARB apportions EIM Outstanding Emissions to each EIM Purchaser according to the equation in 95111(h)(2)(A):

*EIM Purchaser Emissions =*

$$\text{EIM Outstanding Emissions} * \frac{\text{EIM Purchaser's Retail Sales}}{\text{Total EIM Purchasers' Retail Sales}}$$



11

## EIM Purchasers in MRR

- An EIM Purchaser is an Electrical Distribution Utility (EDU) that:
  - Directly or indirectly purchases any electricity through EIM to serve California load in the data year, and
  - Receives allowance allocation in the subsequent year pursuant to section 95892 of the Cap-and-Trade Regulation
- All EIM Purchasers must report pursuant to §95111(h)
- Reporting obligation for EIM Purchasers began on April 1, 2019
  - Required to report EIM purchases for April 1, 2019 through December 31, 2019 by 6/1/2020
  - Required for report for full calendar year in subsequent years



12

## Split Year Reporting of EIM Imports for CY2019

- Required in order to implement the Updated EIM Purchaser Emissions calculation
- EIM imports and associated emission are calculated consistent with past years but must be reported separately for Q1 2019 and Q2 through Q4 2019
- For example, consider an EPE with 100,000 MWh of EIM imports from Acme Combined Cycle Plant in 2019. 35,000 MWh occurred Jan-Mar; 65,000 MWh occurred April-Dec:
  - Q1 2019 imports of 35,000 MWh reported in the Spec Imports tab of Workbook 1 and flagged as "Q1" in the new "For EIM CY2019 Only" field
  - Q2, Q3, Q4 2019 imports of 65,000 MWh reported in the Spec Imports tab of Workbook 1 and flagged as "Q2-Q4" in the new "For EIM CY2019 Only" field
  - Same generation source for both but reported as two separate line items
  - Both line-items must identify the imports as "EIM" in the "E-Tagged, Metered, or EIM" field in Workbook 1



13

## Annual Retail Sales & EIM Outstanding Emissions

- Annual Retail Electricity Sales
  - Reported in megawatt-hours (MWh)
- Retail sales are used to determine EIM Purchaser Emissions, as calculated by CARB pursuant to 95111(h)(2)
- No split year reporting for retail sales
- IOUs must report total retail sales, and retail sales to all LSEs they serve
- Verifiers are required to review retail sales data
- See updated EPE FAQs, section 7  
<https://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep-power/epe-faqs-2019.pdf>



14

## Cessation of Reporting and Verification

- EPEs may only cease reporting and verification when applicable cessation requirements under MRR have been met
- Imports
  - An EPE with any MWh imports, regardless of emissions, must continue to report until no reportable imports for an entire subsequent compliance period even if imports cease during 2018-2020 compliance period per §95101(h)(1)(B)
- Exports Only
  - If exports cease, EPE must continue to report zero exports (and no imports) for three consecutive years per §95101(h)(2)(C)
- Wheels Only
  - An EPE with wheels only is not required to report or verify, because EPEs only importers and exporters. (Must still meet cessation requirements above)
- Verification
  - EPEs that no longer import or export electricity must verify their emissions data report in the first year in which they report zero imports and exports. Any reporting year thereafter with zero imports and exports is not subject to verification

\*Contact CARB if you think you're eligible for cessation of reporting OR verification\*



15

## General Reporting & Verification Information



16

## Cal e-GGRT Tool Availability

- Tool available NOW
  - 2019 data reporting activated
  - Workbook 1 (forthcoming)
  - Workbooks 2, 3, and 4 are posted
  - <https://www.ccdsupport.com/confluence/display/calhelp/Reporting+Form+Instructions>
- Electric Power Entity module has been activated



<https://ssl.arb.ca.gov/Cal-eGGRT/login.do>



## Verification Tips for Reporters

- Associate your report with your verifier at any time (even if report is not yet certified)
- Correctable errors must be fixed
  - If not, the verifier must submit an adverse statement for errors that affect covered emissions
- If the verifier and reporter disagree on requirements, always contact CARB for assistance
- Ensure the GHG inventory program meets the requirements of section 95105(d) and includes helpful information (New check field in Reporter Info tab of Workbook 1)
  - Robust description of key personnel and procedures
  - Provide copy to verifier as soon as possible
- Provide all CARB written clarifications for reporting to verifier
- Reporters can improve the process:
  - Ensure a contract is in place prior to report submission
  - Provide data to verifiers ASAP after report submission
  - Schedule site visits, or remote desktop (webinar) review in June or earlier
- Ask questions of CARB early to ensure sufficient time to address issues



## Reporting Tips

- Start early, finish early, and involve Verifiers as soon as possible
  - Include enough time to revise data based on verification
  - Some reporters are reaching the 6-year time limit with the same verification body and must hire a new verifier. Contact CARB if unsure.
  - Complete and accurate data must be submitted by the reporting deadline
- Update DR, ADR, Agents as needed**
  - Old employees, etc., have access to system until you remove them
  - Suggest at least DR and at least one ADR or agent as primary points of contact for CARB
- Check CARB guidance, <https://ww2.arb.ca.gov/mrr-epe>
- Save and file any CARB responses in GHG Inventory Program
- Contact CARB for any questions at [ghgreport@arb.ca.gov](mailto:ghgreport@arb.ca.gov)



## Guidance, Preliminary EFs, and Workbook 1



## Updates to Guidance

- Guidance updates based on 2018 MRR
  - Updates posted soon, <https://ww2.arb.ca.gov/mrr-epe>
- EPE FAQ – Updates include:
  - “Split year” reporting for EIM Electricity Imports
  - Retail sales reporting
  - Cessation of Reporting and Verification



21

## Preliminary Emission Factor List

- CARB provided draft specified source emission factors based on February 3 Specified Source Registration workbooks
  - Distributed for review on 2/21/2020
  - Comments were due COB on 3/2/2020
    - Received a few questions on resource names that were modified this year for clarity. ARB IDs remain the same
- Purpose:
  - Allows EPEs to ensure all of their registered sources are included in the workbooks and the emission factors are reasonable based on publicly available data
  - Staff found that providing Preliminary EFs is very helpful to ensure workbooks are complete before posting
- CARB plans to release Preliminary EFs again next year



22

## Workbook 1 Updates

- Reporter Info tab
  - Entity Name in Cell C3 now text searchable
  - EIM Purchaser field set
    - EDU automated; purchased EIM energy (Y/N); EIM Purchaser automated
  - Retail Sales now has Bundled & Unbundled fields
    - Some IOUs must upload separate Unbundled Sales info in separate Excel file
    - Removed Notes field and MJRP total sales field
- Retail Provider tab now named “High GHG”
- Text added to “E-Tagged, Metered, or EIM” field Unspec/Spec Imports:  
“EIM imports not supported by metered output in each interval must be reported as unspecified imports as determined in the lesser-of-analysis”
- Specified Imports tab
  - Added Primary Fuel field based on largest share by MMBtu when multiple fuel types
  - New “For EIM CY2019 Only” field to flag EIM imports as either “Q1” or “Q2, Q3, Q4”



23

## Workbook 1 – Functionality Updates

- Deleted field “Your Relationship to the Specified Source”
  - E.g., SC, Party to Contract, Retail Provider, GPE, TP, Other
  - Informational by design but not directly required under MRR
- Specified Exports
  - Removed emission factors and calculations which were illustrative
- Formula Updates and Minor Edits
  - For better functionality and easier troubleshooting, e.g., Index/Match vs. Vlookup
  - High GHG, CAISO Sales, Spec & Unspec Imports, RPS Adjust, REC Serial, Unspec Exports, Wheeled, & EF List.



24

# EPE Quality Assurance System



25

## CARB Internal Quality Assurance Process

- Our goal for this year:
  - More consistent, comparable, structured results & communications
  - Allow plenty of time for reporters and verifiers to resolve issues
- Based on feedback, CARB intends to have four rounds of QA, with the first occurring following the June 1 deadline, and the last occurring during the last week of July
- The results of CARB's QA will be uploaded to Cal e-GGRT under "CARB Attachments"
- Both reporters & verifiers will be notified via email if any issues are identified through the QA process
- Reminder: CARB QA does not take the place of verification. CARB QA provides systematic review but can never replicate verification



26

## QA Findings – The Detailed Results

ARB_ID	Entity	REPORTING_YEAR	Import_MR_R_Reported	Export_MR_R_Reported	Wheel_MR_R_Reported	Import_OA_TI	Export_OAT_I	Wheel_OAT_I	Import_Diff	Export_Diff	Wheels_Diff	Import_QA	Export_QA	Wheel_QA
999000	ARB_TEST_Facility	2018	25000	1000		30000			5000					Under Reported

- CARB will provide QA results in an easy-to-read spreadsheet
- All checks are run for every routine, but tabs are only created for each report where there are findings
- Every line in a table represents a different finding that was flagged under that QA Check
  - Some QA Checks yield one finding, others can have as many lines as were reported
- The QA results spreadsheet includes a notes field that provides additional context for each finding, esp. where multiple types of findings can be identified within a QA Check



27

## QA Issue Resolution

### For Reporters

- Review the QA results that are uploaded to the 'CARB Attachments' section of your reporting account in the tool
  - If an identified issue requires correction, work with your verifier to revise report
  - If the issue has already been resolved or does not require correction, communicate this with your verifier
  - Check with your verifier or CARB if you do not understand any identified issues

### For Verifiers

- Record all issues in the Log of Issues!
- Work with your reporter as you normally do to resolve all issues
  - Resolutions must be provided for all issues in the issues log even if some did not require correction
- Check with CARB if you have any questions



# Questions??

Please contact CARB at any time if you have questions



# CARB EPE Contacts

GHG EPE Reporting & Verification Assistance Team 2019	Staff	Phone
<b>General Reporting Requirements, Cal e-GGRT Reporting</b>	<a href="mailto:ghgreport@arb.ca.gov">ghgreport@arb.ca.gov</a>	
Manager – Climate Change Reporting Section	<a href="#">Syd Partridge</a>	(916) 445-4292
<b>General Verification Requirements, Cal e-GGRT Verification</b>	<a href="mailto:ghgverify@arb.ca.gov">ghgverify@arb.ca.gov</a>	
Manager – Emissions Data Quality Assurance Section (Verification)	<a href="#">Ryan Schauland</a>	(916) 324-1847
Electricity Retail Providers and Electricity Marketers	<a href="#">Abajh Singh</a>	(916) 322-8276
Verification of Electricity Retail Providers and Electricity Marketers		
Reporting Tool Registration and General Questions	<a href="#">Karen Lutter</a>	(916) 322-8620



# Resources

- Reporting Guidance for EPEs  
<https://ww2.arb.ca.gov/mrr-epe>
- Cal e-GGRT Tool Training  
<https://ww2.arb.ca.gov/mrr-tool>
- Cal e-GGRT Main Help Page  
<http://www.ccdsupport.com/confluence/display/calhelp/Home>
- Accredited Verification Bodies  
<https://ww2.arb.ca.gov/verification>

